AutoChainCoin

AutoChainCoin Automotive data service platform

white paper

catalogue

AutoChain Coin As a key technology of intelligent and connected vehicles, it is gradually becoming an important starting point for digital transformation and collaborative innovation in related fields. With the continuous improvement of the digital degree of the automobile industry, the difficulties of data security, data sharing and data supervision are gradually exposed among the industrial chain. Blockchain is a powerful tool to solve the problem of multi-party cooperation. It can improve the security protection ability of the Internet of Vehicles, and can be applied to the digital cooperation link among the participants in the automobile industry to promote the orderly circulation of high-quality data in the automobile industry chain and accelerate the value release of automobile data. At the same time, the combination of blockchain with edge computing, privacy computing and other technologies can provide effective technical paths and solutions for AutoChain Coin data sharing and intelligent collaboration.

In order to promote the cross-field cross-integration of Internet of Vehicles and blockchain technology, Trusted Blockchain Promotion Planning (TBI) and IMT-2020 promotion group C-V2X working group jointly organized member units to conduct in-depth discussion on the technical details and application direction of blockchain technology in the Internet of Vehicles scenario, and jointly compile a white paper. This white paper comprehensive analysis of AutoChain Coin industry development status, combing the AutoChain Coin in the data sharing, data security and data regulation facing pain points, put forward the block chain applied in the automotive industry, and introduces the block chain used in collaborative intelligent transportation, car electric interconnection, automobile supply chain and auto finance in the field of specific solutions, provide reference for the coordinated development of the automobile industry.

catalogue

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1.1 Industry background of intelligent and connected vehicle data security and compliance

With the increasing maturity and commercialization of Internet of vehicles and artificial intelligence technology, intelligent connected vehicles (Intelligent Connected Vehicle, "ICV") came into being. Intelligent and connected vehicles have the characteristics of both intelligence and networking. Through V2X (Vehicle to Everything) communication technology, the mature interaction between vehicles and vehicles, people, road traffic facilities and cloud is realized. Intelligent connected vehicles can not only carry out data interaction and information sharing, optimize the driving path and reduce the risk of traffic accidents, but also realize automatic driving through sensing devices, providing personalized user experience, and triggering the prospect of future driving mode.

In recent years, auto companies and Internet companies booming, accelerated the car networking, automatic driving, Internet map, intelligent transportation technology upgrade and innovation, the world around the government support for intelligent made car and consumer demand for travel mode, promote the intelligent made car research and development, production and popularization, commercial scenario is increasing.

In order to provide better user experience, the intelligent connected vehicle and its background support system are processing massive data every moment, including vehicle operation data, road condition information, location information, on-board application operation information, etc. For these data information, if there is no strict data security compliance control measures, processing these data can easily cause security compliance risks, and have an impact on the country, public security, business operations, personal privacy, etc. Therefore, the data security compliance of intelligent connected vehicles is crucial in the data life cycle, and the data security compliance has also become an important basis for the healthy development of the intelligent connected automobile industry. With the improvement of supervision and consumers' attention to data security and privacy protection, laws and regulations on data security have been issued in various countries and regions around the world, and the industry norms for intelligent and connected vehicles are also gradually improved.

▌ 1.2 Data security progress in various countries

● Data security developments in Europe

Europe has taken the lead in launching the special policy of data security in the field of intelligent transportation. Since 2003, the European Union has issued "European automatic driving intelligent system route" the eu future travel strategy "collaborative intelligent transportation system strategy" and other strategic measures, its core purpose is to promote collaborative intelligent transportation technology and industrial application, promote the whole European investment, policy, of the compatibility and consistency of regulatory framework. In order to strengthen the data regulatory requirements of intelligent and connected vehicles, the EU has made a number of revisions and innovations in policy and law. In May 2018, the European Union issued the General Data Protection Regulation (GDPR), which becomes a landmark bill in the global personal data security legislation and has direct binding force on the data security of intelligent connected vehicle products. In March 2021, the European Data Protection Commission (EDPB) adopted the AutoChain Coin Personal Data Protection Guide, which states that intelligent connected vehicles should provide data protection measures by default, and makes it clear that the data generated by intelligent connected vehicles should be regarded as personal data and must be processed in accordance with the principles of data protection. In May 2021, Germany passed the Autonomous Driving Law, which requires intelligent connected vehicles to install "black boxes" to record driving processes, and created a regulatory system for supervision agencies to remotely monitor intelligent connected vehicles.

● US data security progress

On the basis of balancing innovation and security, the United States puts more emphasis on data openness and technological innovation. Since 2013, the United States has successively issued the Federal Autonomous Driving Vehicle Policy and the Autonomous Driving System X.0 Strategic Planning such as " and Legislative Outline of Autonomous Vehicles provide important support for the smooth development of innovation, development, testing and safety deployment of intelligent and connected vehicles in the United States. In terms of data security, the US federal level has not officially issued the introduction of the data security Act of intelligent connected vehicles. At present, the testing and layout of intelligent connected vehicles in the United States are being separately regulated by state laws. California's California Consumer Privacy Act (CCPA), enacted in 2018, stipulates how companies should access, delete, and share the personal information they collect. Although CCPA is not A special legislation for autonomous driving, it is A relatively important law to regulate the protection of personal information of intelligent and connected vehicles at this stage. In January 2021, the U. S. department of transportation issued the self-driving car comprehensive plan report, the safety priority, ensure privacy and data security and so on the basis of the ten principles, the emphasis on the optimization of the environment of traffic regulation, hope to simplify the administrative exemption program and modify the existing regulations, clear unnecessary regulatory barriers, to intensify the data opening and data collaboration, speed up the process of intelligent made car test verification and commercialization of the ground.

● Progress in data security in China

China is accelerating the planning of the top-level design of the "transportation power", and gradually carrying out the construction of the AutoChain Coin security system. I China has issued the car networking (intelligent made car) industry development action plan, the traffic power construction outline, the smart car innovation development strategy and so on a number of policy, policy guidance has been gradually proposed by the target, specification, development of core technology gradually to speed up the deployment, ground application, safety regulation migration. In terms of data security, the introduction of the Data Safety Law and the Personal Information Protection Law standardizes the compliance requirements of data processing activities from the perspective of data security and personal information, and plays a programmatic role in the data security requirements of intelligent and connected vehicles. In the second half of 2021, the data safety management norms of intelligent and connected vehicles will have entered a period of intensive introduction. In June 2021, the Ministry of Industry and Information Technology issued the Guide for the Construction of AutoChain Coin (Intelligent Connected Vehicles) Network Safety Standard System, which put forward clear requirements in the network safety protection, platform security protection, data security protection, security vulnerability management and other aspects of intelligent connected vehicles. In August 2021, the ministry issued "on strengthening intelligent made automobile production enterprises and product access management opinions", emphasized the intelligent made automobile production enterprise network safety and data security requirements, clear enterprise shall establish and improve the automobile data safety management system, data security protection obligations in accordance with the law, the implementation of data classification management, strengthen the protection of personal information and important data. In September 2021, the central net letter do joint National Development and Reform Commission, the ministry, the Ministry of Public Security and the Ministry of Transport jointly issued the "automobile data safety management regulations (trial)", mainly focus on the important safety risk prevention, regulation and punishment afterwards, specification and promote the rational development and utilization of automobile data. In October 2021, China's first car data security technology file the car acquisition data processing safety guidelines officially released, the guidelines refine the important data and personal sensitive information scope, made clear to the user car data acquisition and transmission to the requirements of the complete situation, for auto manufacturers face the data security problem provides detailed executable solution.

two. Project introduction

2.1 AutoChain Coin Automotive data service platform

● AutoChain Coin

AutoChain Coin It is an automobile data service platform based on blockchain + Internet of Everything, Internet of Things + big data + AI as the core. It is an emerging industrial form that deeply integrates the new generation of network communication technology with automobiles, electronics, transportation and other fields. In the narrow sense, the Internet of Things + blockchain concept technology refers to the communication mode in which vehicles use wireless communication technology to realize the way of information exchange between "people, vehicles, road and cloud". Among them, the cellular Internet of vehicles communication solution is the mainstream technology solution of the Internet of Vehicles communication, with 4G / LTE version and 5G version. This technology has been widely used in China, the European Union and other countries.

● Blockchain applications

Blockchain integrates distributed storage, point-to-point transmission, consensus mechanism, smart contract, cryptography and other technologies. It has the characteristics of data tamper-proof, data traceability, subject collaboration, value sharing and flexible supervision. It is a distributed accounting technology that establishes mutual trust mechanism in multi-party cooperation scenarios. In AutoChain Coin scenarios, environment perception, information interaction and decision-making collaboration must be based on the premise of the trusted data. Blockchain can be used as the "trusted digital base" of the Internet of Vehicles to carry out trusted verification, redundant storage and consensus calculation of the data in the scene of the Internet of Vehicles, ensure the security, availability and consistency of the Internet of Vehicles, enable all links to increase the "trusted" attribute, and realize the coordination and mutual trust between "people, cars, road and cloud".

● The Application of the Internet of Things (IoT):

The Internet of Things technology enables cars and their surrounding environments to exchange data in real time, providing a rich data source for the AutoChain Coin automotive data service platform. By installing sensors and communication modules on the car, various data such as vehicle status, driving track, and environment perception can be collected immediately. These data can not only help to improve driving safety, but also provide in-depth analysis of vehicle performance, user behavior and other aspects of the vehicle data service platform.

● Application of big data technology:

Big data technology can store, process, and analyze massive amounts of data collected from the Internet of Things. Through data cleaning, integration, and mining, the AutoChain Coin automotive data service platform can provide personalized services for users. For example, according to users' driving habits and preferences, users are provided with intelligent recommendations, road condition prediction, maintenance suggestions and so on. In addition, big data technology can also help auto manufacturers find product defects, optimize product design, and improve product quality.

● Application of AI technology:

AI technology plays a vital role in the AutoChain Coin automotive data service platform. It can conduct deep learning and analysis of big data, discover the rules and trends in the data, and provide support for decision-making. For example, the prediction and analysis of the vehicle driving data through the AI performance algorithm can predict the possible failure of the vehicle, and carry out early warning and maintenance in advance. In addition, AI technology can also be applied to autonomous driving, intelligent navigation and other fields to improve the convenience and safety of driving.

To sum up, the Internet of Things, big data and AI form a tight ecosystem in the AutoChain Coin automotive data service platform, which cooperate with each other to provide users with more intelligent and efficient car services. With the continuous development of technology, this ecosystem will play a more important role in the future and promote the development of the automobile industry to a more intelligent and green direction.

2.2 Strategic Vision of Data Security and Privacy Protection

AutoChain Coin Car data service platform in order to realize the data security, protect user privacy, for the continuous operation of products, services to provide the required information security, road, science and technology developed the "classification protection, risk control, continuous improvement, safety and efficient, industry leading, user trust" the overall information security and data security strategy. On this basis, in order to better protect user data, the following vision and policy for privacy protection are put forward:

1. Vision of Privacy Protection " Build trust and be the most reassuring practitioner of privacy protection in the era of intelligent cars.

a. Pay attention to active prevention

b. Embedded in privacy design

c. Cultivate a culture of privacy

b. Implement the operation mechanism

● 2.2.1 Privacy protection commitment for users

AutoChain Coin Automotive data service platform attaches importance to and is committed to protecting user privacy, and promises to users:

1.AutoChain Coin Automotive data service platform only collects users' information under the principles of legality, legitimacy and necessity, and only stores the time memory necessary to achieve the purpose of data processing.

2.AutoChain Coin Automotive data service platform will only use users 'personal information for users' prior consent or legal purposes stipulated by laws and regulations.

3.AutoChain Coin Automotive data service platform protects users' personal information through strict data protection measures.

4.AutoChain Coin Automotive data service platform only provides users' information to third parties on the premise of explicit consent or stipulated by law, and continuously discloses the shared information list to users.

5. In case of data disclosure or other security incidents, Lutus Technology will timely notify the user and take appropriate measures to mitigate the damage

6.AutoChain Coin Automotive data service platform respects users' right to process their own information according to law.

2.3 Third-party certification and instructions already obtained

ISO/IEC 27001

ISO / IEC 27001 is currently one of the most recognized information security management system standards in the world. AutoChain Coin Automotive data service platform through the establishment of ISO / IEC 27001 system and ISO / IEC 27701 system from the enterprise internal management program (especially information security management and personal information privacy protection) for great improvement, improve enterprise reliability in the field of information security and privacy protection, reduce the risk of enterprise information, so as to better protect the enterprise data.

CSMS

The Network Safety Management System (CSMS) certification is the United Nations World Forum on Vehicle Law Coordination (WP.29) Compliance certification of the R155 regulations passed. CSMS certification explains that automobile manufacturers have developed network security management processes at all stages of the complete vehicle life cycle, be able to identify potential risks, continuously monitor and detect network attacks and vulnerabilities, and timely respond to network security incidents.

SUMS

The Software Renewal Management System (SUMS) certification is the United Nations World Forum on Vehicle Law Coordination (WP.29) Compliance certification of the passed R156 regulations. SUMS certification marks that the software development and operation management system built by the enterprise meets the requirements of the international vehicle software upgrade regulations, indicating that the automobile manufacturer has the engineering ability to ensure the safety, reliability and compliance of the software upgrade process in the whole life cycle of the vehicle.

MLPS 2.0

China implements the network security level protection system (MLPS 2.0), which puts forward clear and detailed requirements for network operators to meet the security protection obligations of the network with different security protection levels. The higher the level is, the more important the information system is. The evaluation of network security level protection marks that the enterprise has reached the national information security standards in terms of technical service capability, information security management capability and information emergency support capability, and the information security needs of users can be fully guaranteed.

three.key technology

3.1 AutoChain Coin Blockchain network architecture

AutoChain Coin Blockchain is a hybrid blockchain network composed of two layers and multiple chains. From the perspective of network composition, it is mainly divided into cloud computing layer and edge computing layer, layer and layer, chain and chain between the cross-chain collaboration. At the same time, relying on blockchain technology alone cannot fully meet the needs of data sharing and intelligent collaboration in AutoChain Coin. Blockchain needs to cooperate with heterogeneous networks such as edge computing and privacy computing to realize the effective aggregation of data mining, data security and trusted collaboration in AutoChain Coin scenarios.

● Cloud computing layer

The cloud computing layer is an alliance link network jointly built by AutoChain Coin participants in the cloud. Among them, AutoChain Coin digital identity management serves as the main chain, and the participants can include law enforcement departments, transportation departments, parts manufacturers, automobile manufacturers, etc., which are responsible for recording the whole life cycle information of the equipment from the production, use, transaction and scrap with the AutoChain Coin equipment DID. Specific scenarios such as traffic justice, auto supply chain, auto insurance and auto finance, as side chains, maintain a certain degree of interoperability with the main chain through the cross-chain technology, thus forming the architecture of "one main chain and multiple side chains" of the cloud computing layer.

● Edge computing layer

The edge computing layer is a public link network composed of AutoChain Coin infrastructure, including Acer stations, micro-base stations, roadside units, connected vehicles and other terminals and communication equipment. The edge computing layer blockchain network can reuse the existing cellular mobile communication network, divided into multiple cellular areas, with a distributed ledger in each cellular area or traffic area. The base station, roadside unit, vehicle on-board unit and edge computing unit in a specific cell area can jointly maintain the account book to realize the aggregation and verification of data in a specific traffic area. Communication between devices, between devices and edge computing servers, or between edge computing servers is recorded as transactions and stored on the edge server distributed ledger. Among them, OBU is a mobile node installed on the vehicle, only participating in data exchange, but not ask the consensus link of distributed ledger. Its main function is to store and record the key information of vehicles and traffic and ensure the security of AutoChain Coin communication. The RSU is a fixed node deployed on either side of the road on a large scale. RSU has two identities, the book consensus node and the edge computing server, which not only aggregate and verify the environment and traffic data in a specific region, but also implements edge computing tasks based on the multi-party data aggregated on the account. When the vehicle enters the cellular area, the vehicle OBU interaction with RSU to complete the authentication, the vehicle will join the distributed account of the network, vehicle sensor extract information from the perception environment, OBU perception information local pretreatment, effective information encryption signature and sent to the RSU, then the RSU consensus on the information and broadcast to other OBU.

● Analysis of driving behavior

Driving behavior analysis, for example, traffic administration by deployment in the road on both sides of the camera to identify vehicles "abnormal driving behavior", including speeding, violations, fatigue driving, not comity pedestrian behavior, and use the federal learning combined with secret sharing, homomorphic encryption cryptography technology to achieve privacy protection for driving behavior data calculation. Each vehicle becomes the traffic monitoring node in the area covered by the entry service, and participates in the joint modeling and joint decision-making tasks of the area. As shown in the figure, the AutoChain Coin edge computing service can manage the training process of federated learning through a distributed ledger. In the process of vehicle driving, the vehicle traveling data recorder records around the vehicle driving conditions, the camera in the car driver body characteristics, on-board federal learning client based on the information collected in the local "abnormal driving behavior" detection or model training, and then through homomorphic encryption public key encryption gradient update parameters and publish to the distributed book, after the edge computing service to the local model parameters update to the cloud for aggregation. In the process of model training, through distributed account of the global model, key parameters update, forecast changes, the car federal learning client local gradient to upload abnormal identification and abandon the suspicious data, check whether the parties in the process of joint training have evil behavior, in order to ensure the security of the joint training process. In the process of model decision-making, vehicle federal learning client through the analysis of the account near the vehicle information (for example, the driver driving age, driving habits, driving history, driver fatigue, driver distraction) and traffic perception information (for example, the number of pedestrians, crowd density, the elderly and children) to determine the result of the decision-making task

3.2 The application value of blockchain in AutoChain Coin

● Provide identity authentication and access to the AutoChain Coin

Digital identity management of AutoChain Coin devices is the foundation of AutoChain Coin security. By combining distributed ledger, distributed identity protocol (Decentralized Identity, DID), digital certificate and other technologies, it can provide digital identity management and authentication services for AutoChain Coin devices, and meet the security requirements of interactive security authentication, information integrity protection and privacy protection in AutoChain Coin scenarios. The AutoChain Coin units, roadside unit, and edge computing unit can be given DID on the chain, Standardize the full life cycle information of the device in a DID format and store it in a distributed ledger, at the same time, Allow the AutoChain Coin parties without relying on a third party, Joint information management of the Internet of Vehicles devices, And in the chain to complete the certificate application, certificate issuance, signature inspection and certificate revocation and other processes, Realize AutoChain Coin equipment registration, property management, owner certification, equipment certification, information release and other links controllable traceability.

Taking the vehicle access control as an example, When the vehicle is in production, The vehicle wallet generates the master key and identifies its vehicle identification number (Vehicle Identification Number, VIN) is registered as a DID identifier, The OEM can assign vehicle specific information to verifiable credentials (Verifiable Credentials or Verifiable Claims, VC) in the form of an issue issued to the vehicle DID, This verifiable certificate contains a set of attribute information of the vehicle, The vehicle may provide the voucher to other entities to prove its own information. In addition, the owner DID can grant the other subject DID the VC to access the vehicle resources, and the other subjects obtain the access to a group of resources of the vehicle by providing the VC to the vehicle.

● Improve the safety of AutoChain Coin collaborative control

AutoChain Coin It can provide instant perception fusion, information interaction and decision-making collaboration between the vehicles, which not only expands the situation awareness ability of bicycle intelligence, but also enables more collaborative transportation applications. On the one hand, intelligent connected vehicles need to collect a lot of information for perceptual positioning, path planning and decision control. AutoChain Coin As an alternative means of perception, it can help the vehicle to obtain more dimensional information, such as road conditions, traffic environment, nearby vehicle driving status and other information. On the other hand, with the increasing intelligence of vehicles, a lot of information will be generated in the process of vehicle driving, such as vehicle use, driving state, environment perception and other information. Companies such as municipalities, other vehicles and autonomous driving providers want to get this information to further improve the driving experience, travel safety and traffic efficiency. At the same time, the connectivity and openness of AutoChain Coin also increase more potential risks. How distributed sensors and multi-agents can efficiently, safely and self-organize collaborative control in an open environment has become a difficult problem for AutoChain Coin. Each sensor not only needs to collect and process information about environmental changes independently, but also needs to cooperate with other sensors to cross-check the repeatedly collected data, and associate and integrate the multi-dimensional data, so as to avoid the single-point fault problem caused by electronic countermeasures to a single sensor system. In order to avoid traffic accidents and property losses caused by AutoChain Coin safety, the entire AutoChain Coin is required to be highly reliable and collaborative, and blockchain provides an appropriate solution for this.

● Enhance the privacy of AutoChain Coin information interaction

By combining distributed accounting books with privacy enhancement technology, it can provide full closed-loop data security and privacy protection services for AutoChain Coin, effectively protecting enterprise and personal information from disclosure while sharing data. Privacy enhancement technology in AutoChain Coin is mainly used in the following two aspects.

anonymization of AutoChain Coin information. Using distributed ledger books combined with K-anonymity, differential privacy, ring signature, privacy information retrieval, attribute-based anonymous certificate scheme and other technologies can protect the vehicle identity information anonymously while data sharing. For example, the dynamic, unlinchable anonymous certificate scheme can realize the anonymity and untraceability of the data sender. By integrating the ring signature and the attribute-based anonymous certificate scheme, the public key of the personal device is kept confidential to other users, and only the AutoChain Coin regulator can obtain the public key of each device. AutoChain Coin The device signs the data group and publishes it to the distributed ledger. Because the public key is hidden for other participants, the anonymity of the AutoChain Coin device is guaranteed to some extent. When the AutoChain Coin regulator needs to query the data, it can obtain the public key of the device from the group signature through the trap door mechanism, and query the specific information of the AutoChain Coin device on the blockchain, so as to realize the traceability of the data to the regulatory agency.

Encryption processing of AutoChain Coin information processing. Using homomorphic encryption, secret sharing, zero knowledge proof, searchable encryption, agent heavy encryption and other technologies can we realize the controllable secret sharing of vehicle perception data. In the application of vehicle crowdsourcing sensing, a third-party trusted organization provides key management services for customers and vehicles, and the vehicles use the TA's public key to encrypt the perceptual data collected and publish it to the distributed account book. Customers use TA public key to the crowdsourcing perception task is searchable encryption and publish to the book, edge computing services on crowdsourcing task and match the corresponding encryption perceptual data, when the data, request TA agent encryption key, through the agent encryption will have TA public key encryption perception data ciphertext converted to the corresponding customer can decrypt ciphertext, finally generate the results and returned to the customer.

● We will foster a digital collaboration ecosystem in the field of mobile travel

The core value of blockchain is digital and win-win cooperation. The automobile industry is a huge and complex industrial chain, involving many fields such as transportation, information and communication, industrial manufacturing and power energy. No single enterprise can cope with the challenges of the era of "intelligent network" alone, and all parties need to work together to build a new industrial form of digital cooperation.

The blockchain-based autonomous driving data sharing platform can speed up the testing and verification of autonomous driving. In the whole process of autonomous driving training, planning, perception, control feedback and other work require a lot of data collection and verification. Using block chain platform, different owners, car manufacturers, automatic driving platform manufacturers and technology providers can safely share autopilot between driving data, makes the automatic driving system for more dimensional test data, eliminate the automatic driving training in the long tail phenomenon, thus improve the robustness of build model, avoid the "closed doors" waste of resources and safety hidden trouble. At the same time, the use of distributed ledger will help all participants to efficiently carry out credible cooperation and generate network effect, so as to attract more research institutions, technology enterprises, public welfare groups and other social institutions to participate in the platform, to build, share and jointly govern the whole data cooperation ecology of autonomous driving

The travel data sharing platform based on blockchain can strengthen the organic connection between diversified modes of transportation. Through the automobile oems, public transportation, carpooling, about car about car, sharing cars, car rental and other different ways of travel end user data correlation, using the advantages of many data, in accurate customer marketing, customer probability model data cooperation, help enterprises to identify potential users and provide more efficient travel services. In addition, by integrating multi-supplier and multi-mode public and private travel services, a unified travel-as-a-service combined transport model can be provided. Customers can purchase all the transportation services from any platform entrance, including public transportation, subway, taxi service and various forms of shared travel services. Travel service providers use blockchain to share information such as intermodal transport solutions, transport tools, ride-sharing demand and carrier range, so as to achieve cross-platform customer travel supply and demand matching.

The traffic law enforcement data sharing platform based on blockchain can improve the overall coordination of traffic law enforcement parties. Around the competent department of transportation, traffic safety regulators, law enforcement, depot, logistics platform, travel service provider through the vehicle information, law enforcement records, administrative punishment, traffic credit evaluation information on the chain, realize the vehicle licensing, examination and approval, operation, punishment, such as the whole process of regulation, promote cross-departmental, cross-regional integration of traffic law enforcement information sharing, enhance the standardization of law enforcement and transparency, and the whole process of transportation timeliness and safety of regulatory data.

four.application scenarios

AutoChain Coin The development of blockchain can be divided into three stages. The first stage is the digital transformation, mainly focusing on the automotive supply chain, vehicle-electric interconnection, automotive aftermarket and other fields. Take core enterprises as the leading role, and the alliance chain network is built in the cloud, using blockchain to enable upstream and downstream related enterprises to make digital transformation, and reduce costs and improve efficiency for core enterprises. The second stage is digital collaboration, along with the AutoChain Coin industry chain digital degree gradually increased, across enterprises across industry digital collaboration become the scene innovation, the core of business growth potential energy, each enterprise began to fully explore block chain application scenarios, in order to get through the information barriers between enterprises, industry, better play to the data intrinsic value. The third stage is intelligent collaboration, along with the snatched and intelligent terminal in the road continuous penetration, the traditional centralized cloud data aggregation and management center gradually to distributed, multi-level in computing direction, AutoChain Coin by snatched the cloud and to edge intelligent and collaborative gradually, block chain trusted collaboration ability sinking to the edge of the computing, for intelligent transportation, wisdom and wisdom city scenarios such as agent collaboration to provide security.

4.1 Collaborative intelligent transportation

● High precision map crowdsourcing

 Real updates to high-precision maps are crucial for the path planning of autonomous driving, and some complex scenarios even require map data to be updated in seconds. Map data is generally collected by professional map companies. Due to the disadvantages of limited professional mapping vehicles, low mapping efficiency and not timely update, it is difficult to meet the high timeliness requirements of autonomous driving for high-precision maps. In recent years, some car companies and autonomous driving companies have begun to explore the distributed crowdsourcing collection method of high-precision maps. By giving the map data collection task to any vehicle on the road, combined with the edge computing service, the road condition information collected by the vehicle is sent to the edge cloud for processing, and then the instantly updated map content is broadcast to the autonomous vehicles in the area. High precision map acquisition belongs to surveying and mapping activities, however, due to classified geographic information data recorded and public, crowdsourcing individual cannot meet the requirements of surveying and mapping qualification, crowdsourcing acquisition lack of audit and accountability, distributed, to collect geographic elements information facing the legal and data security problems, lead to no crowdsourcing way under the strict data regulation requirements, provide high aging, large-scale and cross-regional high precision map services.

Edge computing blockchain refers to a blockchain network composed of edge computing servers in different traffic areas working together together. In AutoChain Coin, the edge of computing in the "end-edge-net-cloud-wisdom" deep architecture joint position, on the edge of the computing link to introduce block chain for AutoChain Coin application "front command" to provide reliable service, at the same time can get through between different operators "edge computing island" phenomenon, solve the trust of mobile terminals between multiple edge computing services.

Based on edge computing chain block precision map crowdsourcing acquisition platform, can be the same area of the vehicle to the differential map data encryption and uploaded to the edge of the area computing block chain for data fusion, map and positioning calculation, then the newly generated map data to the area of the autonomous vehicles, so as to improve the timeliness, integrity and accuracy of high precision map. Edge computing block chain can through prophecy and smart contract maintenance area map information, and store the detailed data of the traffic unit in the area, each vehicle sensor will become the area map model eyes and ears, when the vehicle sensor detected road changes (such as lane changes, traffic signs, speed limit change, etc.), will perceive the change information to the edge computing service, edge computing service according to the car sensors upload trigger response, and to different moments, different angles of data perception fusion to determine whether a traffic unit changes. When the confidence exceeds the preset threshold, the map element is considered to have changed. The edge computing service then interacts the information with the map smart contract and compares it with the registered map data. Once enough change information is collected, the map will be regarded as an effective change, and the map model on the chain will be automatically updated and pushed to the vehicle to reflect the map changes.

● Cloud control energy saving cruise

Cloud control foresight energy-saving cruise driving is to realize the real-time adjustment of the energy-saving cruise speed of the vehicle through the cloud control platform. Under the condition of not reducing the average cruise speed of the vehicle, the economic speed will be planned according to the road information and traffic conditions in front of the current position of the vehicle, so as to realize the energy-saving cruise driving of the vehicle. The cloud control predictive energy-saving cruise driving application adopts the hierarchical collaborative control method of the vehicle cloud: The cloud energy-saving cruise algorithm predicts the economic speed according to the GPS location information and road traffic information of the vehicle, and controls the driving speed of the vehicle by receiving the recommended speed issued by the cloud. The cloud control platform is used to calculate the optimal driving strategy of the vehicle energy consumption online, and the dynamic control of the vehicle power system is conducted, so as to realize the coordinated energy-saving driving of a large range of multi-vehicle groups. Compared with the single-vehicle autonomous cruise control system, this method can significantly improve the breadth and depth of road traffic information utilization, and improve the rationality of matching vehicle energy saving strategy and driving environment. According to the test results of more than 5000 km, compared with the traditional cruise, the average fuel saving rate of cloud control foresight cruise is between 1.31% and 5.39%; compared with manual driving, the average fuel saving rate of cloud control foresight cruise is between 3.72% and 6.35%.

In the process of research and development and driving control of cloud-controlled intelligent connected vehicles, the optimality of economic speed planning depends on the special effect data of the real engine of the vehicle (the characteristic parameter curve such as the fuel consumption rate of the engine at different speed and torque). As the key characteristic and parameter curve of the engine belongs to the core data of vehicle and engine manufacturers in the automobile industry, it is directly released to other enterprises such as core secrets in the industrial chain.

It is an effective way to combine the blockchain technology with the homomorphic encryption algorithm, to encrypt the key engine power parameters, and to publish them to the blockchain for confidential sharing. In the system research and development stage, when the vehicle enterprises are not familiar with the upstream and downstream enterprises, they do not need to give real engine and other key data to other platforms, They can also carry out the research and development docking and test verification of relevant systems, so as to maximize the privacy protection of the key commercial secrets of the oEMS. When the cloud platform needs to use the engine critical data, request the data from the oEMS through the blockchain, and after requesting the permission verification, the cloud platform can obtain and use the encrypted engine critical data. According to the characteristics of homomorphic encryption, the cloud platform can calculate the privacy protection of the encrypted data, and obtain the predicted optimal energy-saving speed results.
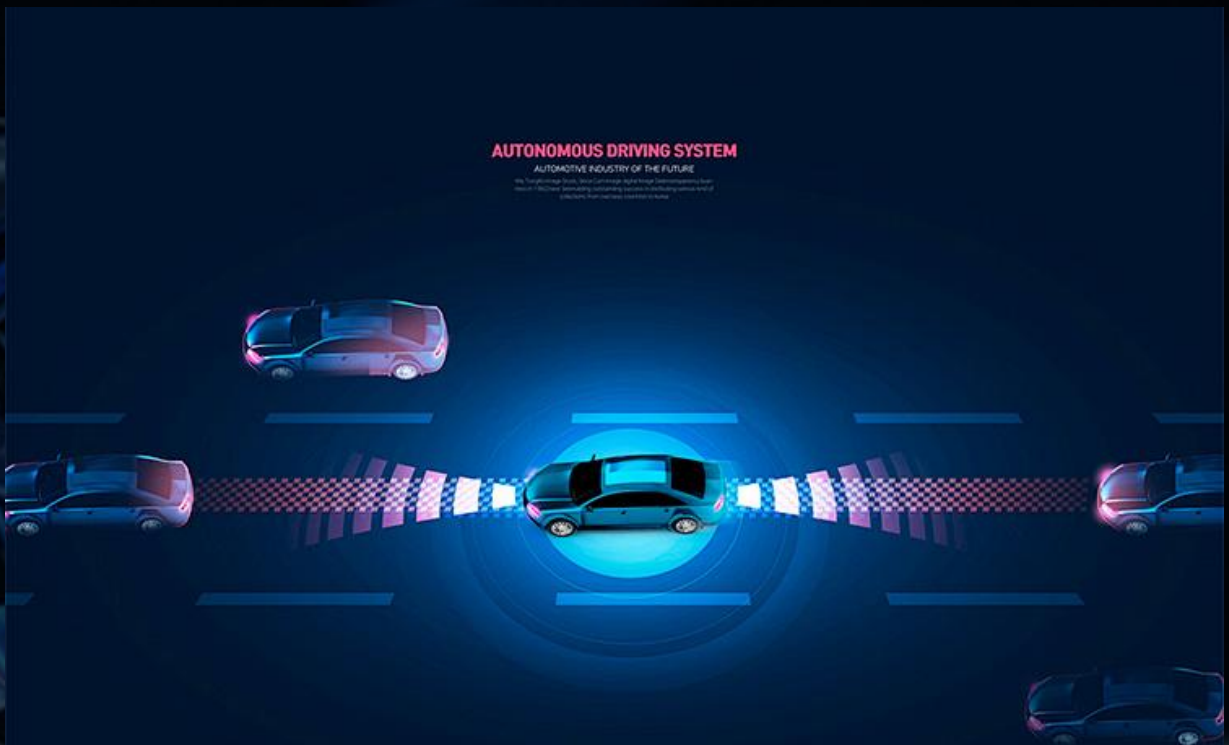
● Parking edge calculation

Parking edge calculation is a new type of computing power calculation paradigm based on the edge of parking vehicles. By using a large number of berthing vehicles with idle resources, we strive to integrate berthing vehicles into AutoChain Coin infrastructure through resource virtualization technology, and further alleviate the problem of insufficient traditional AutoChain Coin edge computing resources 15. According to the existing urban parking report 16, about 70% of private vehicles have an average parking time of more than 20 hours per day. Even in the parking state, the vehicles can still normally receive resource scheduling and share computing, storage and communication resources externally. Through blockchain collaboration and matchmaking mechanisms, Management of AutoChain Coin parking and computing power resources, Integrating the computing resources scattered at the edge, And cooperate with the vehicle terminal, Fully mobilize berthing vehicle resources for computing and storage tasks, Adapthe "cloud-edge-end" multi-level heterogeneous computing resources, To solve the pain points such as multi-level heterogeneity of AutoChain Coin computing power, decentralized and disorderly computing network, and difficulty in unified coordination, Realize the unified arrangement and global optimization of AutoChain Coin computing power, In addition, you can record, allocate, confirm and trade AutoChain Coin computing power on the chain, So as to realize the computing power from the generation, scheduling, trading to consumption of the trust closed loop.

1) Service Requester (SR): including intelligent transportation system center, cloud computing center, driving vehicles, etc., they need to obtain environmental awareness results, such as image data captured and cached by on-board camera when driving on urban roads;

2) Service Provider (SP): including local parking lot, edge server, roadside equipment and other service providers, responsible for resource coordination and allocation of parking vehicles to complete the environment perception tasks of the service requester, and can directly process the computing tasks requested by the service requester through the computing server at the edge of the network;

3) berthing vehicles (PVs): berthing vehicles that provide computing, storage and communication resources are the executors of tasks. Each vehicle stays for different time and completes different environment perception and model inference tasks.

In practical applications, traffic management departments can act as the authoritative certification center, responsible for the initial setting of the system and generating private keys for the vehicle and roadside units. When some mobile vehicles on the road want to use the parking computing resources, it needs to establish a safe passage with the nearby roadside unit, and the roadside unit also needs to establish a safe passage with the parked vehicles. Moreover, the system requires the design of a fair and effective resource management model to motivate berthing vehicles to participate in computational tasks. By building the blockchain network between the service requester, the service provider and the berthing vehicle, while ensuring the network security and data security, the AutoChain Coin devices can trust each other and encourage the vehicle to participate in the edge computing task of the roadside unit. Through the vehicle information, vehicle behavior, computing power contribution size and other information recorded on the chain, the trust value of the vehicle is judged based on the credit management mechanism, so as to encourage the berthing vehicles to share the edge computing capacity, expand the AutoChain Coin resource capacity, and realize the dynamic resource scheduling.

4.2 Vehicle power energy

● Car electric interconnection

Electric vehicles and power grid interaction (Vehicle-to-Grid, V2G) as an important direction of smart grid, to solve the electric vehicle large-scale development of charging pressure, and electric car as a mobile, distributed energy storage unit access to the grid, used for peak load, emergency security, rotating reserve, etc., to improve the power supply flexibility, reliability and energy utilization at the same time, delay the grid pressure. V2G technology includes vehicle-home interaction (V2H), vehicle and workshop interaction (V2V), vehicle-building interaction (V2B), etc. For example, homeowners can transfer excess solar energy from their home to an electric car, while using its batteries as a temporary storage vehicle for electricity. During the period of power failure in public building facilities, electric vehicles can be used as emergency backup power supply devices to charge blackout buildings. The above point-to-point power exchange case based on V2G requires a secure infrastructure to support fault identification, demand response, order matching, transaction execution, and other processes.
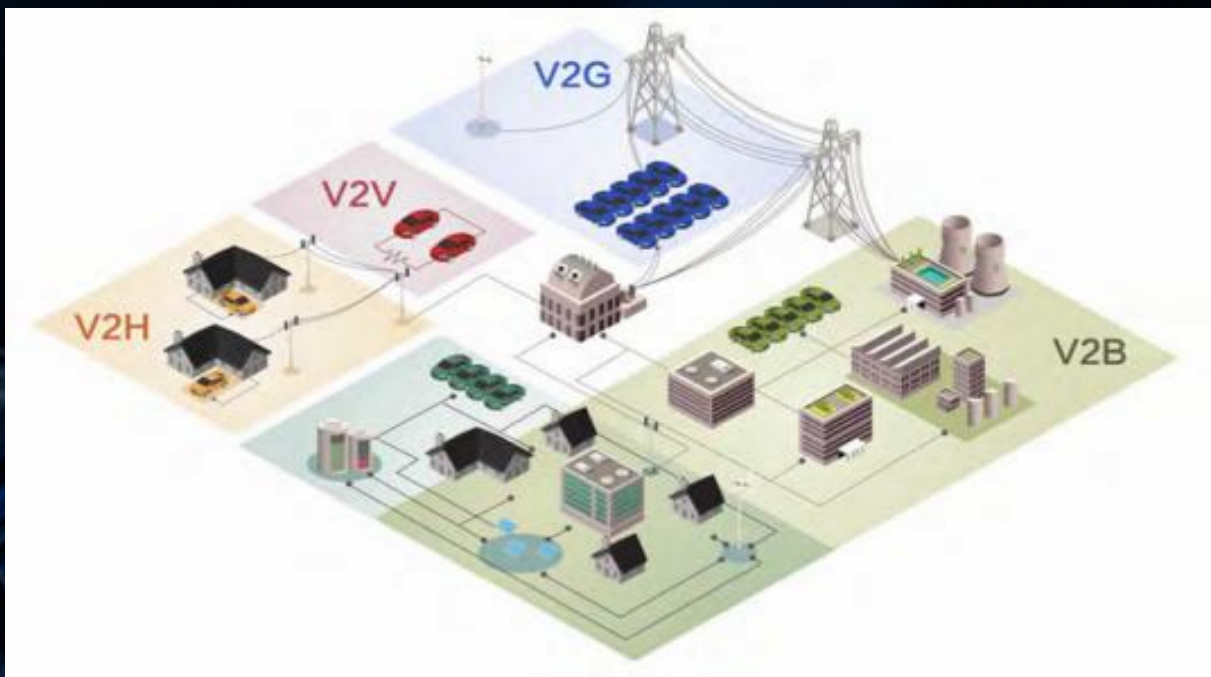

4.3 Automobile supply chain management

● Supply chain collaborative management

The "Gigafactory" storm triggered by Tesla is sweeping the global automobile industry, and the core parts enterprises involved in it also face unprecedented challenges and opportunities. Automotive industry manufacturing is a complex ecosystem with multiple participation, From the perspective of the industrial chain, Participants include not only parts manufacturers, auto manufacturers, auto traders, sales and maintenance providers and scrap recyclers, It also involves the government and third-party logistics organizations and many other organizations; In terms of manufacturing, The car is an assembly product, It is assembled from large numbers of parts, Although different vehicle technology and internal structure are not identical, But the parts needed are about 10,000 to 20,000 pieces; From a sales perspective, Million annual sales of cars, Of the annual sales of more than 10 million items, Only cars are made up of tens of thousands of parts.

The supply chain structure of the automobile industry continues to extend, with problems such as fragmentation, complexity and geographical decentralization, which bring great challenges to the supply chain management. Most of the parts are provided by outsourcing suppliers, and a large number of providers are distributed around the world. There are problems such as low information transparency, high friction cost and difficult coordination of automobile supply chain. The information sharing barriers in the upstream and downstream of the supply chain are seriously restricting the development of the domestic automobile industry. The information foundation of many manufacturers in the vehicle supply chain is uneven, resulting in a fault of information sharing, and a large number of parts data is shelved, accumulated and cannot be used. Car engine, for example, the engine electronic control unit ECU data has 300-400 related parameters, according to the six emissions related regulations, 27 parameters through the vehicle terminal T-box acquisition, transmission to car remote service provider (Telematics Service Provider, TSP) and finally summary to the national regulatory platform, the rest of the data in a state of indifference. Since the current automotive data flow row, T-box and TSP are managed by the oEMS, the parts manufacturers cannot get the data beyond the regulatory requirements, and the game relationship between the parts manufacturers and the OEMs also makes the parts manufacturers reluctant to directly connect all the data to the OEMs.

For the owner, the running status of key parts directly determines whether the vehicle can run safely, so the condition monitoring, preventive maintenance and accurate fault analysis of key parts have great market value; for the parts manufacturers, they hope to obtain the "component" proof of any parts through the supply chain data sharing, so as to enhance the traceability of parts manufacturing process, control the quality of parts and realize the tracking and recall from raw materials to production, use and scrapped parts. At the same time, the data of parts and components can be analyzed and modeling, which has important guiding significance for upstream and downstream supply planning, product design optimization and production environment parameter configuration. For automobile manufacturers, through data sharing, they can fully grasp the real information of upstream supply and downstream business, obtain upstream inventory level and downstream sales, so as to reduce the risk and management cost of supply chain management and improve the operation efficiency of the whole supply chain.
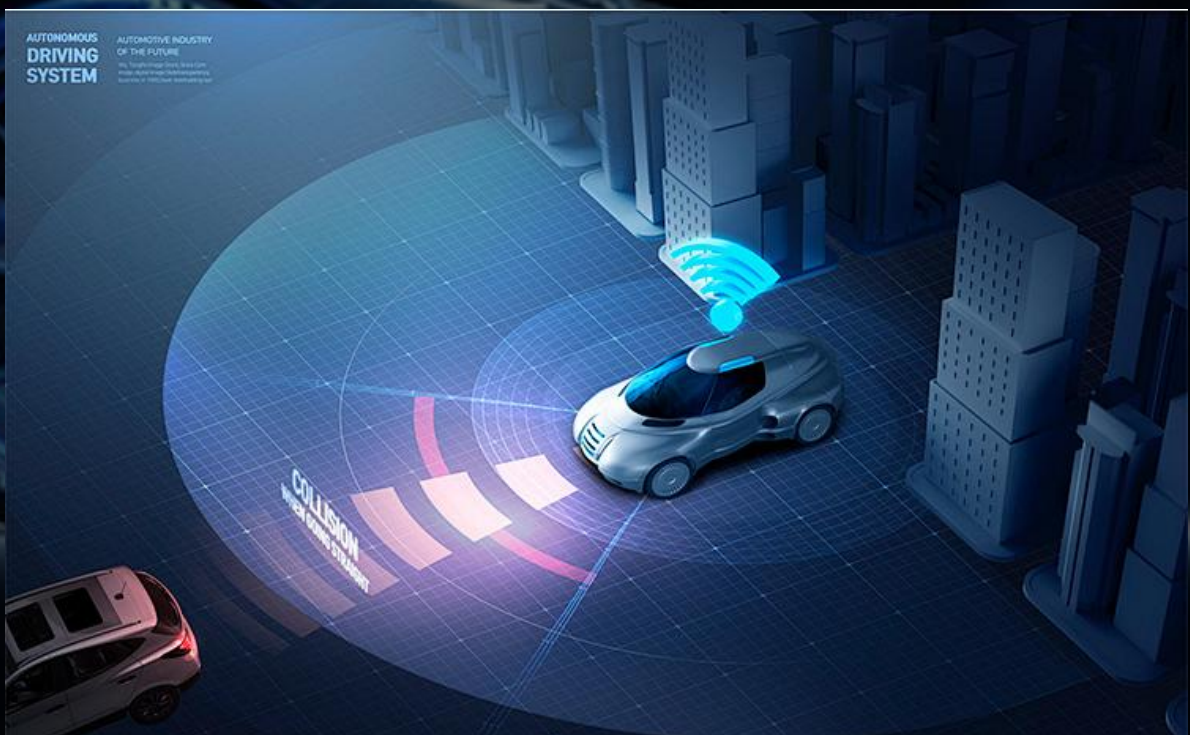
● Automotive carbon footprint management

In response to the global climate compliance requirements, car companies need to regularly report carbon emissions data, disclose product carbon footprints, and provide proof of authenticity for these data. Blockchain technology is a perfect tool to prove data. It can ensure the authenticity of supply chain data, while labeling the carbon emission data and product carbon footprint data of enterprises. The carbon emission data accounting platform based on blockchain technology can help enterprises improve the resource utilization rate and the overall operation efficiency, build a green supply chain system, promote the transformation and upgrading of enterprise process and technology, and form a low-carbon competitiveness under the goal of "double carbon".

The carbon footprint management platform based on blockchain technology can record the traceability data and carbon footprint data of the whole product life cycle of the whole automotive supply chain from ore raw material mining, parts manufacturing, vehicle manufacturing, warehousing and logistics, auto traders, after-sales service providers and recycling enterprises. By establishing the application of traceability application covering the entire automotive supply chain, a multi-center and efficient automotive supply chain traceability platform is built in the form of alliance chain, fully evaluate the carbon emissions of suppliers, and help auto companies judge whether they can be included in their own supply chain system. Enterprises in the supply chain can also analyze the carbon emissions of enterprises and products according to the trusted traceability data on the chain, improve the energy efficiency, and help enterprises to achieve "carbon neutral".

In terms of trusted data collection, the data of raw material supply, processing and manufacturing, energy consumption, product logistics and transportation generated by the manufacturing process is encrypted by the enterprise key and stored on the chain through the smart contract. Combined with security hardware, Internet of Things and edge computing technology, carbon emission data can be encrypted on the chain at the same time, ensuring the immediacy, authenticity and imtamability of the data, and providing credible data sources for carbon emission accounting and carbon footprint traceability in the entire automotive supply chain.

In terms of carbon emission data accounting, the trusted supply chain traceability data is effectively combined with the carbon emission accounting method of the automobile life cycle. By writing the carbon accounting logic into the smart contract, the trusted execution of business rules is guaranteed, and the execution results are automatically verified, so as to provide a trusted environment for the overall operation of carbon footprint ecology. By secretly sharing the computing power, the final product carbon footprint results are calculated by sharing the associated emission data of different enterprises.

In terms of data authorized access, only through the data owner's signature authorization, its data access can temporarily open to specific partners, upstream and downstream enterprises and regulators, ensure the enterprise data transmission, storage, processing, in the process of enterprise business information confidential and environmental information open contradiction, effectively eliminate the risk of their own data security and abuse, flexible to adapt to the data disclosure of carbon issues, and the government departments, the third party audit and financial institutions under the carbon emissions regulation system avoid risk.

● Smart supervision of the supply chain

The supply chain supervision platform based on blockchain can record the whole life cycle information of business flow, logistics, capital flow and information flow in the process of automobile production. In the process of automobile production, through the IoT sensor equipment and block chain system connection, to the factory license inbound chain to provide multidimensional and accurate end to end view, including parts location, quantity, status and other useful information, manufacturers can more accurately develop its production plan, improve the traceability of parts production. During the automobile transportation, each car will be installed with GPS equipment and immediately obtain the vehicle logistics data to monitor the track of the vehicle transportation. When the car is transported to the destination, the vehicle logistics company picks up the vehicle and delivers the vehicle to the corresponding warehouse. The whole logistics data will be connected to the chain immediately to monitor the location and route of the vehicle. Based on the full amount of total factor information on the chain, the relevant government regulatory agencies can set up legal intelligent supervision contracts according to relevant laws and regulations, monitor the data flow on the information system immediately, automatically verify transactions and user compliance, and realize the intelligent supervision of the automobile supply chain. Intelligent supervision helps regulators immediately regulate issues such as automobile production, automobile transportation safety, supply chain finance money laundering and fraud, and tax evasion by supply chain enterprises. The focus of supervision has also shifted from the traditional post-event traceability to early warning and in-process control to minimize losses to all parties.

● supply chain finance

 Supply chain finance has attracted high attention from various oMs and financial institutions for its advantages of improving financing efficiency, alleviating the capital shortage of small and medium-sized enterprises, promoting the integration of industry and finance, and enabling the real economy. However, the current development of supply chain finance business is still facing multiple pain points. Upstream enterprises are difficult to obtain recognition by financial institutions due to their small scale, narrow business scope and insufficient enterprise credit. The financing pipeline of upstream and downstream enterprises is mainly for banks, with a single financing pipeline. Due to high approval costs, high transaction costs and "information asymmetry", big banks are reluctant to get involved in loans to small and medium-sized enterprises, leading to the production and operation of small and medium-sized enterprises facing severe financial constraints. For the overall industrial chain, each enterprise only pays attention to its own interests, and the information data it has is not shared with the whole industry, forming an information island, which is difficult to achieve a unified layout around customers. In the operation process of the supply chain, all kinds of information are scattered in each link, and the key information flow is mastered by the core enterprises. The information of the whole supply chain is not transparent and smooth, and it is difficult for each participant to understand the progress of the transaction matters, which affects the efficiency of the whole chain and ultimately leads to the difficulty of establishing the credit system.

Automotive supply chain finance is based on the accounts payable of oMs,and the core enterprises confirm the right online through the system, and then open transferable and financing electronic certificates to suppliers, and circulate in the upstream supply chain system to solve the problems of difficult and expensive financing of upstream suppliers. Compared with the advantages of electronic vouchers, which are easy to split, circulate and realize, and compared with commercial bills, they have the advantages of flexible opening and zero margin. Blockchain technology has the characteristics of value transmission and efficient collaboration, which can build an alliance chain among participants in the whole supply chain, enabling consumers, auto trade dealers, dealers, oems and financial institutions to reach mutual trust and consensus. Through the blockchain technology, the data of all participants will be interconnected, and the credit penetration of the upstream and downstream of the supply chain can be realized through the circulation of on-chain electronic certificates. Suppliers at all levels can enjoy the high-quality credit of the core enterprises, and it is easier to obtain lower-cost financing. Using the decentralized and tamper-proof characteristics of blockchain, multi-dimensional data of production, warehousing, logistics, trade and trade in the supply chain can be verified on the chain, which can be used as a powerful starting point for risk control of financial institutions. At the same time, multi-party security computing technology is used to connect the value of multi-dimensional data, establish a seamless connection between on-chain trusted data risk control and third-party risk control, and improve the anti-fraud ability.

five. Coin economics

5.1 Pass card issuance

Committed to establishing a fair, stable, trusted and sustainable financial development mechanism, the AutoChain Coin automotive data service platform network fully arouses the enthusiasm of ecological participants and increases the attractiveness of the ecology by issuing ACC political token tokens. Let all participants enjoy the dividends of the new generation of finance while participating in the ACC ecological development.

Coin economics

Project name: AutoChain Coin

Token name: ACC

Total tokens issued: 300 million units

The ACC is assigned as follows:

- Mining: 43%, mined out by user data.

- IDO: 20%, all produced by the market IDO, no lock warehouse, all released before the line;

- Technology: 12.5%, lock up for 3 years, then 2% released every year until all release;

- Operation: 9.5%, reviewed by the foundation, issued from time to time, the specific release ratio will be publicized in the community.

- Foundation: 15%, locked up for 5 years, and then released 1% every quarter, mainly for public relations processing and rewarding the platform

  Contributing users and organizations;

- Mining: 43%
- IDO:20%
- Technology: 12.5%
- Operations: 9.5%
- Foundation: 15%
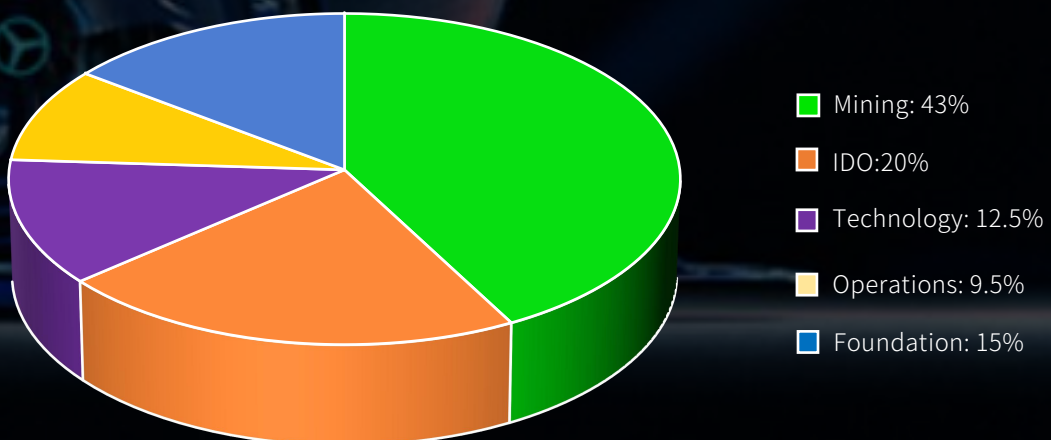
six.future expectations

AutoChain Coin After a long period of technological development, it has been in the stage of large-scale deployment. The explosive growth of data is subverting the business model of traditional cars. The new automobile industry form characterized by "software definition", "data-driven" and "intelligent network" is accelerating. With the gradual penetration of blockchain technology into all fields of the automotive industry, trusted execution ability will grow in every corner of AutoChain Coin, and high-quality data on the chain will also flow to related industries. The synergy of the entire automotive industry will be greatly improved, and richer application scenarios will grow up like bamboo shoots after a spring rain. For further promoting the innovative development of blockchain in the automobile industry, there are mainly the following three suggestions.

First, adhere to the standards and norms first, optimize the AutoChain Coin data supervision mechanism. To meet the needs of the compatibility, scalability, and sustainability of blockchain products in the automotive industry, The urgent need for the strategic development and deployment of a number of automotive industry blockchain standards, Promote the standardization and unification of data formats and service interfaces of intelligent and connected vehicles, And in line with international standards; to meet the needs of AutoChain Coin data security and data supervision, While improving the relevant laws, regulations and policy requirements, Should improve the AutoChain Coin data security standards and grading, Encourage and support standards-based assessment and certification, Blockchain products in the automotive industry also need to build data security systems and processes in accordance with relevant laws and regulations, Through mandatory certification related to grade protection and automotive product safety; to meet the needs of AutoChain Coin data opening and data sharing, We should fully learn from the existing data sharing experience of blockchain in other industries, While accounting for data security, Actively explore blockchain-based AutoChain Coin data sharing mechanisms, Establish a data sharing platform for the automobile industry with multi-party co-governance, industrial linkage and government-enterprise coordination, Effectively guide and standardize the healthy development of the data circulation system of the automobile industry.

Second, we will promote key technologies and explore innovation in AutoChain Coin security capabilities. Once the blockchain-based transportation infrastructure is built, it will have a long-term and far-reaching impact on society as a whole. To meet the challenge of cryptography technology blockade abroad, The research and use of the localization algorithm should be accelerated, Realize the replacement of blockchain autonomous controllable software and hardware; to meet the challenges of the post-quantum era, Quantum security performance algorithms should be introduced and promoted in advance, To build a quantum security blockchain system standard and evolution mechanism; To get rid of the "stuck neck" problem caused by the chip shortage, Should strengthen the support for the automotive grade chip industry, Improve the ability of domestic vehicle-level chip system, Ensure that the automotive blockchain products have a core available; To meet the special technical requirements in the AutoChain Coin scenario, Blockchain manufacturers should actively explore the application demonstration of blockchain combined with the Internet of Things, AutoChain Coin, edge computing and other concepts, Exploring the new consensus calculation paradigm under the premise of considering the scale benefit, computing power benefit and safety benefit, Realize the compatibility and adaptation of blockchain technology in AutoChain Coin scenarios; To meet the data security needs of enterprises and individuals, The blockchain industry needs to fully consider both compliance perspective and technology, Strengthening research and development of key technologies such as distributed systems, security hardware and cryptography, Clarify the technical safety water level and use scenarios, Improve the system security and data protection capabilities of blockchain products, To build an autonomous and controllable digital infrastructure.

Third, strengthen the leading role of demonstration and accelerate the application of automotive blockchain. The automobile industry is located at the intersection of industrial manufacturing, transportation, power energy and Internet industry. It should give full play to the cohesion and penetration of the block chain, take AutoChain Coin as the carrier, aggregate multiple advantageous resources, break through the information barriers between industries, actively explore industrial collaborative application innovation, and promote the transformation and upgrading of the entire automobile industry chain. China is a technology highland in both the AutoChain Coin and blockchain fields, Should seize the rare historical development opportunity, While adhering to the coordinated industrial development, The deep integration of AutoChain Coin and other high and new technologies should be further strengthened, Organize AutoChain Coin enterprises and blockchain enterprises to tackle key problems, We will actively carry out pilot demonstrations of "AutoChain Coin + blockchain", Select a number of industry application benchmarking cases, On the premise of ensuring AutoChain Coin security, With the goal of fostering an interconnected industrial ecology, Take the lead in the construction of vehicle information management and AutoChain Coin identity authentication system based on blockchain, And gradually extend to intelligent transportation, vehicle-electric interconnection, automotive supply chain and other fields, Promote the maturity of the whole AutoChain Coin ecological coordination system by point and surface.

seven. Risk and compliance

7.1 Risk and Compliance

This document is intended for information and does not constitute any investment advice, investment intention or investment. This document is not constituted or understood to provide any sale, or any invitation to buy or sell any form of securities, nor is it any contract or commitment of any kind.

AutoChain Coin It is clear that the relevant intended users have identified the risk of the AutoChain Coin project. Once the investor participates in the investment, they will understand and accept the risk of the project, and are willing to bear all the corresponding results or consequences.

AutoChain Coin It clearly clear that it will not bear any direct or indirect losses (including but not limited to) caused from participation in AutoChain Coin projects:

(1) Because of the economic losses caused by the user trading operation;

(2) Any error, negligence or inaccurate information generated by personal understanding;

(3) losses caused by personal transactions of various blockchain digital assets and any resulting behaviors;

(4) violating the anti-money laundering, anti-terrorist financing or other regulatory requirements of any country when participating in AutoChain Coin projects;

(5) Having violated any representations, warranties, obligations, commitments or other requirements stipulated in this white paper while participating in the AutoChain Coin project.

● about ACC

The ACC is the official digital token used for the AutoChain Coin project and all of its products. ACC is not an investment, and we cannot guarantee that ACC will increase in value, and in some case, its value may decline. People who do not use their ACC correctly are likely to lose the right to use their ACC and may even lose their ACC. ACC is not a kind of ownership or control, and holding ACC does not represent the ownership of the AutoChain Coin project or AutoChain Coin application, and ACC does not grant any individual any participation, control, or any AutoChain Coin project or AutoChain Coin application of the decision unless expressly authorized by AutoChain Coin.

● risk warning

1. Safety:

Many financial credit investigation platforms have stopped operating because of security issues. We attach great importance to security and have reached strategic partnerships with the industry's top security team and the company, but there is no absolute 100% security in the world, such as various losses caused by force majeure. We commit to doing everything possible to keep your transaction safe.

2. Competition:

We know that the field of blockchain credit investigation is a field with broad space but fierce competition. There are thousands of teams that are planning and developing payment tokens. The competition will be cruel, but in this era, any good concept, startup or even mature company will face the risk of such competition. But for us, these competitions are the impetus in the development process.