Abstract

PoAI is a novel consensus algorithm that aims to construct an independent SCP consensus public chain by integrating ChatGPT AI chatbot, IP NFT assets, and social capital credit data assets. The algorithm uses a federated learning privacy protection mechanism to build a personal social capital credit data asset for each user. The algorithm also prevents fraudulent relationships through facial recognition technology, thereby ensuring fairness and authenticity in social relationship mining. Through the evaluation and incentive mechanism, PoAI provides a method for data quality assessment and motivation for GPT nodes. Ultimately, PoAI enables the creation of personal social capital credit data IP that can be traded on SCP data value trading platforms, enabling value circulation.

Introduction

The rise of artificial intelligence (AI) has led to an increasing demand for data. The value of data has grown exponentially, and individuals and companies alike are recognizing the importance of protecting their data and privacy. The PoAI algorithm seeks to solve this problem by enabling individuals to create their social capital credit data IP.

The PoAI algorithm is designed to create a public chain that integrates the ChatGPT AI chatbot and IP NFT assets. By using facial recognition technology, the algorithm ensures that social relationship mining is fair and authentic. PoAI uses a federated learning privacy protection mechanism to build a personal social capital credit data asset for each user. Through the evaluation and incentive mechanism, PoAI provides a method for data quality assessment and motivation for GPT nodes.

PoAI enables the creation of personal social capital credit data IP that can be traded on SCP data value trading platforms, enabling value circulation. PoAI allows individuals to monetize their social capital credit data IP while maintaining their privacy and data rights.

PoAI Algorithm Overview

PoAI algorithm comprises several components, including SCP consensus, ChatGPT AI chatbot, facial recognition technology, IP NFT assets, federated learning privacy protection, data quality evaluation, and incentive mechanisms.

SCP Consensus

The PoAI algorithm is built on the SCP consensus protocol, which enables the creation of a decentralized public chain. SCP provides a safe and reliable platform for PoAI's social capital credit data IP trading.

ChatGPT AI Chatbot

ChatGPT AI chatbot is integrated into the PoAI algorithm to enable users to interact with the platform. The chatbot provides users with a way to ask questions and receive feedback on their social capital credit data IP. The chatbot's responses are used to evaluate the quality of the data and provide feedback to GPT nodes.

Facial Recognition Technology

The PoAI algorithm uses facial recognition technology to prevent fraudulent relationships in social relationship mining. The facial recognition technology ensures that the relationships mined are genuine and that no fake relationships are included in the social capital credit data IP.

IP NFT Assets

PoAI creates IP NFT assets for each user's social capital credit data. The IP NFT asset is a unique identifier for the data, and it ensures that the data is secure and tamper-proof.

Federated Learning Privacy Protection

PoAI uses a federated learning privacy protection mechanism to build personal social capital credit data assets for each user. The mechanism ensures that the user's data remains private and is not shared with third parties without their consent.

Data Quality Evaluation

PoAI uses a data quality evaluation mechanism to assess the quality of the social capital credit data IP. The evaluation mechanism ensures that the data is accurate, reliable, and free from errors or biases.

Incentive Mechanism

PoAI provides an incentive mechanism to motivate GPT nodes to contribute high-quality data to the platform. The incentive mechanism rewards GPT nodes that provide accurate, reliable, and unbiased data.

SCP Data Value Trading Platform

PoAI's social capital credit data IP can be traded on SCP data value trading platforms. The platform enables individuals to monetize their social capital credit

1. Implementation

4.1 SCP Consensus Protocol

The SCP consensus protocol is implemented to establish a decentralized and trustworthy network for PoAI. SCP is chosen as it provides high throughput and low latency, making it ideal for a public blockchain network. The SCP consensus protocol provides consensus in the form of Federated Voting Protocol (FVP), which enables validators to reach agreement on the state of the network. In PoAI, every user will have the ability to act as a validator, and participate in the consensus process.

4.2 Social Capital Credit Data Asset

PoAI aims to create a network that allows every user to build their social capital credit data asset. To achieve this, PoAI will establish a social network based on the SCP consensus protocol. Every user will have a unique identity on the network, which will be verified through facial recognition to prevent fake accounts. The social network will allow users to connect with each other and build social capital. Every connection between users on the network will represent a unit of social capital called "Hui."

4.3 ChatGPT AI Chatbot

The ChatGPT AI Chatbot is integrated into PoAI to provide users with the ability to ask questions and receive feedback. The chatbot's question-answering ability is based on GPT-3.5, which allows for natural language processing and a high level of accuracy. Every interaction between a user and the chatbot will be recorded and stored as data for evaluation.

4.4 Hash256 Algorithm

The Hash256 algorithm is used to evaluate the quality of data provided by each node on the PoAI network. The algorithm provides an incentive for nodes to provide high-quality data by rewarding them with "Hui" tokens. The evaluation process is based on the Federated Learning model, which ensures that the evaluation is performed without compromising the privacy of the user's data.

4.5 NFT Asset

PoAI creates a unique NFT asset for each user based on their social capital credit data asset. The NFT asset represents the user's data asset and serves as proof of ownership. The NFT asset can be pledged as collateral to obtain "Hui" tokens, which can be traded on the SCP data value exchange. The NFT asset can only be transferred between users and cannot be traded.

4.6 SCP Data Value Exchange

The SCP Data Value Exchange is a platform on the PoAI network where users can trade their "Hui" tokens. The exchange is designed to facilitate the exchange of value between users without compromising their privacy. Every transaction on the exchange is recorded on the SCP ledger, ensuring transparency and accountability.

4.7 SCP Voting Contract

The SCP Voting Contract is implemented on the PoAI network to ensure that the development direction and achievements of AI are governed and owned by the entire community. The contract is designed to be voted on by all users on the network, ensuring that the AI development direction is aligned with the needs of the community.

1. Conclusion

PoAI is a decentralized public blockchain network that aims to create a social capital credit data asset for every user. PoAI leverages SCP consensus protocol to provide a trustless and secure network for users to build their social capital. The integration of ChatGPT AI Chatbot allows for the collection of high-quality data, which is evaluated using the Hash256 algorithm. The SCP data value exchange and NFT asset ensure that the social capital credit data asset has value and can be traded. Finally, the SCP Voting Contract ensures that the development direction and achievements of AI are owned and governed by the entire community.

The core idea of PoAI algorithm is to build a decentralized blockchain with an independent SCP consensus mechanism, which incorporates ChatGPT AI chatbot and NFT assets for interactive user engagement. By employing privacy-preserving federated learning, the algorithm aims to create a unique social capital credit data asset for each user.

The SCP protocol is used to establish a social capital network similar to the Pi Network, where facial recognition is used to prevent fake connections, ensuring the fairness and authenticity of social mining. The chatbot algorithm's question path and feedback list are transformed into an IP reputation data innovation capability data asset, allowing users to build a personal data asset.

The algorithm uses a federated learning model quality evaluation method to assess and incentivize the data provided by each GPT node, similar to PoW's hash256 algorithm. This approach ensures privacy protection and encourages the creation of individual data assets. Ultimately, the PoAI algorithm creates a continuous process of constructing NFTs for individual data's truth ground, allowing for personal IP reputation data and ability proof. These NFTs can be traded on the SCP data value exchange, allowing for value circulation.

It is important to note that the minimum unit of value for social mining is "hui," which is a personal credit asset similar to SBT, but not a token. It complies with Chinese government regulations for personal data rights and cannot be bought or sold. Instead, it can be used as collateral for credit assets that can be traded, allowing for value circulation. Hui is essentially the shadow of "yuan," which is the essence of emptiness, and the idea comes from Buddhist terminology. The value circulation is achieved through the "yuanqi yuanlu" of credit social mining.

Finally, the PoAI algorithm's governance is achieved through SCP voting contracts, ensuring comprehensive community governance and ownership of AI development direction and outcomes.

3.2 SCP Protocol

The PoAI algorithm's social capital network is based on the SCP protocol, which is similar to the Pi Network. The SCP protocol is a consensus mechanism that establishes a network of social capital relationships based on mutual trust. Each user can invite new members to the network, and each connection represents a "hui" credit asset.

To prevent the creation of fake connections, the algorithm employs facial recognition technology to verify each user's identity. This ensures the authenticity and fairness of social mining and provides a reliable foundation for the construction of social capital networks.

3.3 ChatGPT AI Chatbot

The ChatGPT AI chatbot is a critical component of the PoAI algorithm, providing users with a personalized question path and feedback list. The question path is customized for each user based on their interests and preferences, while the feedback list is designed to capture their opinions and attitudes.

By analyzing user feedback and interactions, the algorithm can create a unique IP reputation data innovation capability data asset for each user. This data asset is essential for building personal data assets and is a crucial factor in the creation of social capital credit assets.

3.4 Federated Learning

The PoAI algorithm employs privacy-preserving federated learning to evaluate the quality of data provided by each GPT node. The federated learning model quality evaluation method ensures that each node's data is assessed and incentivized, similar to PoW's hash256 algorithm.

By using federated learning, the algorithm can protect user privacy while still allowing for the creation of personal data assets. This approach ensures that users are rewarded for their contributions to the network, and the quality of the data is maintained.

3.5 NFTs and SCP Data Value Exchange

The PoAI algorithm creates NFTs for individual data's truth ground, allowing for personal IP reputation data and ability proof. These NFTs can be traded on the SCP data value exchange, allowing for value circulation. Users can use their "hui" credit assets as collateral for credit assets that can be traded, enabling value circulation.

The SCP data value exchange ensures that each user's data assets have value and can be used to generate income. This approach incentivizes users to contribute to the network and ensures that the quality of the data is maintained.

3.6 SCP Voting Contracts

The PoAI algorithm's governance is achieved through SCP voting contracts, which enable comprehensive community governance and ownership of AI development direction and outcomes. SCP voting contracts ensure that all stakeholders have a say in the network's future and are incentivized to contribute to its success.

SCP voting contracts also enable the community to vote on the development direction of the algorithm and ensure that it remains transparent and accountable. This approach ensures that the algorithm remains true to its core principles and provides value to all stakeholders.

Additionally, PoAI utilizes a federated learning model to evaluate the quality of the data provided by each node in the GPT network. Similar to the proof-of-work (PoW) algorithm used in blockchain technology, PoAI incentivizes nodes to provide high-quality data by rewarding them with tokens. However, instead of mining blocks, nodes are rewarded for contributing valuable data to the network. This incentivizes users to ensure the accuracy and authenticity of their data, thereby improving the overall quality of the network.

Overall, PoAI aims to create a decentralized and transparent social capital credit system that is protected by the privacy-preserving nature of federated learning. By utilizing SCP consensus protocol and integrating facial recognition technology, PoAI ensures the authenticity of social relationships and reduces the possibility of fraudulent behavior. With the creation of personal data assets in the form of NFTs, individuals can have control over their data and benefit from its value through the SCP data value trading platform. Finally, by implementing a voting contract on the SCP public chain, the development of AI can be democratically governed by the community to ensure that AI benefits everyone.