The University-Industry Alliance of Blockchain Technology and Applications

Abstract

Nowadays virtual currencies and virtual transactions are well-developed. Bitcoin, Etherum, smart contract, and HyperLedger and so on are wellknown by people. Those technologies are constructed by a concept as known as Blockchain. Experts and scholars start to concern about the next generation technology – Blockchain. Compare to the traditional centralized database-based system, because of features of Blockchain, such as Immutable, Decentralized, Transparent, Autonomy, and Verification, the system built by Blockchain concepts has less security issues and more efficiency. All the nodes in the Blockchain-based system can get the latest information when another node updates and make sure they maintain the same ledger.

The features of Blockchain can improve the traditional systems of the companies and organizations and bring them to the next generation of automatically information updating and maintain. Blockchain concepts and technologies can be implemented in different domains. Now we got (1) blockchain bicycle sharing economy, (2) food production and sales history blockchain, (3) financial securities and centralized custody blockchain, (4) e-book block chain number digital rights management, (5) digital evidence preservation, (6) block chain security, privacy protection and efficiency improvement technology, has been applied to the Internet of Things industry, agricultural production and marketing, food processing industry, logistics, finance, digital identification, security industry, publishing industry, digital content industry and other industries.

The alliance has the experience and technology of application development in the above six fields. In the future, it will use the existing technology and development experience to assist enterprises or organizations to analyze and introduce the technology of blockchain technology, to seek innovative blockchain applications, organize the characteristics of each application scenario with the needs of the blockchain system construction or technical support.

Keywords: Blockchain, Blockchain Bicycle Sharing Economy, Food Production And Sales History Blockchain, Financial Securities And Centralized Custody Blockchain, E-Book Block Chain Number Digital Rights Management, Digital Evidence Preservation, Block Chain Security, Privacy Protection