IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 1, April 2022
Impact Factor: 6.252

Research on Blockchain Technology and Know-How in Cryptographic Exploration

Mr. Venkatesh[1], Jayasurya R D[2], Jayesh Lokesh Korade[3], Jagath S K[4]
Senior Associate Professor, Department of Computer Science and Engineering[1]
Students, Department of Computer Science and Engineering[2,3,4]
Alva's Institute of Engineering and Technology, Tenkamijar, Karnataka, India

Abstract: *Building a common manufacturing unit into a clever manufacturing unit is one of the dreams of "Industry 4.0". As factories pass in the direction of clever development, the current community safety structures can no longer meet the wishes of organisations and users. Aiming at the hidden risks of records leakage and unlawful get right of entry to to the facts of cryptographic manufacturing amenities and merchandise in the clever factory, the article combines the core science of the Internet of Things radio frequency identification (RFID) science and blockchain technology, and proposes a blockchain-based technology, the light- weight password safety authentication mechanism of the clever manufacturing facility RFID system, which has the traits of lightweight, anti-data leakage, and low administration cost. It can make sure the protected and dependable get entry to of industrial information whilst stopping the utility of RFID in clever factories. Security troubles such as replay attacks, manin-the center attacks, and server spoofing assaults additionally grant new thoughts for the lookup on statistics protection safety for clever factories..*

Keywords: Clever Factory; Blockchain; RFID; Authentication

REFERENCES

[1]. Zhuoyi Zhao, K. Jo Min. Blockchain Traceability Valuation for Perishable Agricultural Products Under Demand Uncertainty[J]. International Journal of Operations Research and Information Systems (IJORIS),2020,11(4).
[2]. Naveen Chilamkurti, T. Poongodi, Balamurugan Balusamy. Blockchain, Internet of Things, and Artificial Intelligence[M].CRC Press:2020-09-28.
[3]. E. Golden alie,J. Jesu Vedha Nayahi,Noor Zaman Jhanjhi. Blockchain Technology: Fundamentals, Applications, and Case Studies[M].CRC Press:2020-09-25.
[4]. Kavita Saini,Pethuru Raj Chelliah, Deepak Kumar Saini. Essential Enterprise Blockchain Concepts and Applications[M].CRC Press:2020 09-25.
[5]. Yu-Chung Tsao,Vo-Van Thanh. Toward blockchain-based renewable energy microgrid design considering default risk and demand uncertainty[J]. Renewable Energy,2021,163.
[6]. Zhitao Guan, Xin Lu, Wenti Yang,Longfei Wu,Naiyu Wang Zijian Zhang Achieving efficient and Privacy-preserving energy trading based on blockchain and ABE in smart grid[J]. Journal of Parallel and Distributed Computing,2021,147.
[7]. Abdullah Al-Noman Patwary,Anmin Fu,Sudheer Kumar Battula, Ranesh Kumar Naha,Saurabh Garg.Aniket Mahanti. FogAuthChain: A secure location-based authentication scheme in fog computing environments using Blockchain[J]. Computer Communications, 2020,162.