Secure E-voting System using Block-Chain

Prof. P. A. Dhakate[1], Sakshee Haral[2], Shubham Tambade[3], Anish Teli[4], Kartik Watile[5]

Faculty, Department of Information Technology[1]

Students, Department of Information Technology[2,3,4,5]

Sinhgad Institute of Technology, Lonavala, Maharashtra, India

pankajdhakate11@gmail.com[1], haralsakshee@gmail.com[2], shunhamstambad@gmail.com[3],
anishteli238@gmail.com[4], kwatile8@gmail.com[5]

Abstract*: Block-chain is a peer-to-peer version which allows e- commerce payments, the building of smart cities, data sharing, copyright and royalty protection, etc. It is a decentralized system where there is no central node or server. We have built an e-voting system to overcome the problems such as low voter turnout in several states/ areas. To address this problem, we have designed a voting system where every person could vote by simply logging online either through their mobile phones or their nearest available computer. Block-chain technology when being used with the e-voting system makes the voting process more secure and reliable. The traditional voting system leads to many frauds and forgery. The E-voting system overcomes all the problems that we face in the traditional system. In information security study the online voting system is viewed as an interesting subject. The electronic voting system provides the people to elect their preferred candidate and express their opinions on how they are to be governed. The security community has declared the electronic machines as a flawed system based primarily on physical safety concerns.*

Keywords: Block-chain

REFERENCES

[1]. Liu Y., Wang Q. An E-voting Protocol Based on Blockchain. IACR Cryptol. Eprint Arch. 2017;2017:1043. [Google Scholar]

[2]. Yaga D., Mell P., Roby N., Scarfone K. Blockchain technology overview. arXiv. 20191906.11078 [Google Scholar]

[3]. The Economist EIU Democracy Index. [(accessed on 18 January 2020)];2017 Available online: https://infographics.economist.com/2018/DemocracyIndex/

[4]. Nakamoto S. Bitcoin: A Peer-to-Peer Electronic Cash System. [(accessed on 28 July 2020)]; Available online: https://bitcoin.org/bitcoin.pdf.

[5]. Garg K., Saraswat P., Bisht S., Aggarwal S.K., Kothuri S.K., Gupta S. A Comparative Analysis on E-Voting System Using Blockchain; Proceedings of the 2019 4th International Conference on Internet of Things: Smart Innovation and Usages (IoT-SIU); Ghaziabad, India. 18–19 April 2019. [Google Scholar]

BIOGRAPHY

- Sakshee S. Haral - An Undergraduate Scholar pursuing Bachelors of Engineering in Information Technology from Sinhgad Institute of Technology. She is working under the guidance of Prof. P.A. Dhakate

- Shubham S. Tambade - An Undergraduate Scholar pursuing Bachelors of Engineering in Information Technology from Sinhgad Institute of Technology. He is working under the guidance of Prof. P.A. Dhakate

- Anish D. Teli - An Undergraduate Scholar pursuing Bachelors of Engineering in Information Technology from Sinhgad Institute of Technology. He is working under the guidance of Prof. P.A. Dhakate

- Kartik S. Watile - An Undergraduate Scholar pursuing Bachelors of Engineering in Information Technology from Sinhgad Institute of Technology. He is working under the guidance of Prof. P.A. Dhakate

Copyright to IJARSCT
www.ijarsct.co.in

DOI: 10.48175/568

ISSN
2581-9429
IJARSCT

242