

# “Document Verification System at College Level using Blockchain”

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**Abstract:** Blockchain technology promises to be hugely trending and empowering in education domain computing applications. The digital is becoming an integral part of modern life. So as the use of the digital world increases there are more chances of decrease in the security level. So more the use of digitization more the frauds and less the security. In some cases of personal data, leakage has brought back into the focus the security issues with the different identity sharing mechanisms. A customer is expected to provide his identity for authentication by different agencies. So the document verification process deals with the identification of the user. And in turn, provides the required security. The document verification procedures which are used by the colleges are completely dependent on the encryption. This system can be efficient by using Blockchain technology, which has the potential to automate a lot of manual processes and it is also resistant to hacks of any sort. The immutable blockchain block and its distributed ledger is the perfect complement to the process of document verification. With the addition of smart contracts, fraud detection can be automated.

**Keywords:** Blockchain, verification, Security, Privacy

## REFERENCES

- [1] R. Alvaro-Hermana, J. Fraile-Ardanuy, P. J. Zufiria, L. Knapien, and D. Janssens, “Peer to peer energy trading with electric vehicles,” *IEEE Intell. Transp. Syst. Mag.*, vol. 8, no., pp. 33–44, Fall 2016.
- [2] Y. Xiao, D. Niyato, P. Wang, and Z. Han, “Dynamic energy trading for wireless powered communication networks,” *IEEE Commun. Mag.*, vol. 54, no. 11, pp. 158–164, Nov. 2016.
- [3] J. Kang, R. Yu, X. Huang, S. Maharjan, Y. Zhang, and E. Hossain, “Enabling localized peer-to-peer electricity trading among plug-in hybrid electric vehicles using consortium blockchains,” *IEEE Trans. Ind. Informat.*, vol. 13, no. 6, pp. 3154–3164, Dec. 2017.
- [4] N. Z. Aitzhan and D. Svetinovic, “Security and privacy in decentralized energy trading through multi-signatures, blockchain and anonymous messaging streams,” *IEEE Trans. Depend. Sec. Comput.*
- [5] M. Mihaylov, S. Jurado, N. Avellana, K. Van Moffaert, I. M. de Abril, and A. Now, “Nrgcoin: Virtual currency for trading of renewable energy in smart grids,” in *Proc. IEEE 11th Int. Conf. Eur. Energy Market*, 2014, pp. 1–6.
- [6] S. Barber et al., “Bitter to better-how to make bitcoin a better currency,” in *Proc. Int. Conf. Financial Cryptography Data Security*, 2012, pp. 399–414
- [7] I. Alqassem et al., “Towards reference architecture for cryptocurrencies: Bitcoin architectural analysis,” in *Proc. IEEE Internet Things*, *IEEE Int. Conf. Green Comput. Commun.* *IEEE Cyber, Physical Social Comput.* 2014, pp. 436–443.
- [8] K. Croman et al., “On scaling decentralized blockchains,” in *Proc. Int. Conf. Financial Cryptography Data Security*, 2016, pp. 106–125.
- [9] G. W. Peters and E. Panayi, “Understanding modern banking ledgers through blockchain technologies: Future of transaction processing and smart contracts on the internet of money,” in *Banking Beyond Banks and Money*. New York, NY, USA: Springer-Verlag, 2016, pp. 239–278.
- [10] L. Luu et al., “A secure sharding protocol for open blockchains,” *Proc. ACM SIGSAC Conf. Comput. Commun. Security*, 2016, pp. 17–30.