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Security Enhancement for Forensic Evidences Using Blockchain

Mrs. Vindya L¹, Chethana C², Deepthi Shree S³, Hithaishi AL⁴, Madhavanand J Bandi⁵

Assistant Professor, Department of Information Science and Engineering¹ Students, Department of Information Science and Engineering^{2,3,4,5}

S J C Institute of Technology, Chickballapura, Karnataka, India

Abstract: In moment's digital period, data is most important in every phase of work. The storehouse and processing on data with security is the need of each and every operation field. Data need to be tamper resistant due to possibility of revision. Data can be represented and stored in miscellaneous format. There are chances of attack on information which is vital for particular association. With rapid-fire increase in cyber crime, bushwhackers bear virulently to alter those data. But it's having great impact on forensic attestations which is needed for provenance. thus, it's needed to maintain the trustability and provenance of digital attestations as it travels through colorful stages during forensic disquisition. In this approach, there's a forensic chain in which generated report passes through colorful situations or interposers similar as pathology laboratory, croaker, police department etc. To make the transparent system with invariability of forensic attestations, blockchain technology is more suitable. Blockchain technology provides the transfer of means or substantiation reports in transparent terrain without central authority. Blockchain grounded secure system for forensic attestations is proposed. The proposed system is enforced on Ethereum platform. The tampering of forensic substantiation can be fluently traced at any stage by anyone in the forensic chain. The security improvement of forensic attestations is achieved through perpetration on Ethereum platform with high integrity, traceability and invariability.

Keywords: Blockchain.

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