

# A Peer-To-Peer based System with Blockchain for Secured Voting Scheme (E-Voting)

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**Abstract:** In today's world, when information safety is essential, blockchain is supreme for distributing that information because it gives instantly, provides, and completely unambiguous information stored on an immutable (unchangeable) ledger that can be accessed only by authorized network members. Blockchain increases trust, safety, clarity (Transparency), and the traceability of information transferred across a network. Today voting systems tolerate different safety threats and similarly distributed denial of service attacks (DDoS). Polling booth capturing, vote modification, and unfairly, gaining unlawful (unofficial) access to a computer system. The main objective of a similar fashion would be to deliver a decentralized (single organization cannot handle it) design to run and boost a voting system that is openly and separately (Independently) confirmable. The benefit that we get using of E-voting scheme would be to lessen election expenditures involving material, employee salary, and logistics records. If a voter is not physically present (out of the station) then he can vote remotely. That is it enhances a great degree of attendance. E-voting can be beneficial because anybody can effortlessly access the election. The security of E-voting in terms of verification (Authentication), clone (duplicate) votes, and non-repudiation of votes, is very less. E-voting is being studied hugely, and most of the execution is verified and even used for a while. That's why very few executions (Implementation) are reliable sufficiently and are still in use.

**Keywords:** Blockchain, E-voting System, I-Voting, Blockchain Technology : Cryptographic keys, Peer-to-Peer Network, Digital Ledger

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