

Second International Conference on Networks and Soft Computing : Submission (639) has been created.

1 message

Microsoft CMT <noreply@msr-cmt.org> To: chowdharysayan2805@gmail.com

30 April 2025 at 17:20

Hello,

The following submission has been created.

Track Name: ICNSC2025

Paper ID: 639

Paper Title: E-Voting Using Blockchain Technology: Enhancements with Distributed Smart Contracts and Advanced

Security Mechanisms

Abstract:

Modern democracies rely on credible elections, yet traditional electronic voting systems face concerns over security, transparency, and trust. This paper proposes a blockchain-based e-voting framework to enhance election integrity. Key features include the use of distributed algorithms, smart contract management, and security protocols such as checksums, n-checks, and a master-slave architecture for fault tolerance. Election metadata is stored on IPFS with on-chain hashes for secure access, while admin access is restricted via wallet and key validation. Voter IDs are mapped to wallet addresses, enabling secure vote casting with fixed gas fees. This system aims to ensure a tamper-proof, transparent, and trusted voting process.

Created on: Wed, 30 Apr 2025 11:49:51 GMT

Last Modified: Wed, 30 Apr 2025 11:49:51 GMT

Authors:

- chowdharysayan2805@gmail.com (Primary)

Primary Subject Area: Cyber Security, Block-chain and trusted computing

Secondary Subject Areas: Not Entered

Submission Files:

SecureVote(RP).pdf (214 Kb, Wed, 30 Apr 2025 11:49:35 GMT)

Submission Questions Response: Not Entered

Thanks, CMT team.

To stop receiving conference emails, you can check the 'Do not send me conference email' box from your User Profile.

Microsoft respects your privacy. To learn more, please read our Privacy Statement.

Microsoft Corporation One Microsoft Way Redmond, WA 98052