Submission Summary

Conference Name

International Conference on Recent Trends in Intelligent Computing and Communication

Track Name

Recent Advancements and challenges in Futuristic Technologies

Paper ID

395

Paper Title

IoT-Based Smart Electronic Voting Machine for Candidate Selection Using Fingerprint

Abstract

This paper is the result of the incorporation of IoT technology in EVM, which brings significant changes to voting procedures through improved security, transparency, and accessibility. A Smart EVM using Arduino Uno, ESP32, Fingerprint Sensor modules, push buttons, OLED displays, LED indicators, and a buzzer, for example, can be envisioned. The system provides a biometric authentication method along with secure data transmission towards a cloud server and facilitates real-time tracking of the votes and easy interactions based on auditory and visual feedback. This solution answers the challenges that the EVMs of traditional time face, including tampering, impersonation, and transparency. Improving security efficiency and accuracy, IoT-based Smart EVM builds the confidence of voters about integrity in elections and emphasizes probable cybersecurity risks, infrastructure, and cost.

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Submission Files

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