Patent Search

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Abstract:

ABSTRACT: The Arduino-Driven Electronic Voting System with Biometric Verification and GSM Integration is designed to enhance the security, efficiency, and transpare voting process. The system integrates biometric authentication—such as fingerprint or facial recognition—ensuring that only registered voters can participate in the e biometric verification step eliminates voter impersonation and fraud, making the electoral process more secure and trustworthy. Once a voter is authenticated, the sy them to electronically cast their vote through an intuitive interface. After the vote is submitted, the system uses GSM technology to transmit the voting data securely time to a central server. This ensures that the election results are collected, processed, and monitored immediately, reducing delays and enhancing transparency in th process. This voting system is designed to be easily scalable and deployable in various election settings, ranging from local elections to national elections. Its integrati biometric verification and GSM-based real-time communication offers a modern solution to traditional voting methods, addressing the growing need for secure, effic transparent elections in the digital age.

Complete Specification

Description:DESCRIPTION:

Field of Invention

The present invention pertains to electronic voting systems, specifically an Arduino-based electronic voting system with biometric verification and GSM integration. to enhance the integrity, security, and efficiency of the electoral process. Traditional voting methods, including paper ballots, have faced challenges related to fraud, impersonation, and delayed results. The development of electronic voting systems offers a solution by enabling faster, more secure, and more reliable voting proce especially in areas where traditional methods are difficult to implement.

The invention integrates biometric authentication, such as fingerprint or facial recognition, to verify voter identity before casting a vote. This additional layer of secu ensures that only authorized voters can participate in the election, significantly reducing the potential for impersonation or fraudulent activities. Moreover, the inte of GSM (Global System for Mobile Communications) technology enables real-time transmission of voting data, ensuring immediate updates and results, which is cr maintaining transparency and trust in the election process.

This invention addresses the growing need for secure, accurate, and timely voting systems in democratic processes. By incorporating both biometric verification an communication, it aligns with modern advancements in digital security and telecommunication, offering an advanced solution to traditional voting mechanisms and ensuring that election results are processed and communicated efficiently.

Objective of the Invention

The primary objective of this invention is to develop an electronic voting system that uses biometric verification to authenticate voter identity and ensure the securi

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