Smart Electronic Voting Machine with Face Recognition using Raspberry PI

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Abstract*: It is to eliminate the fraudulent votes that are happening during the election procedure and to provide a highly secured data transfer to IOT which produces results who is in the lead for every minute after voting it will show with the help of this smart EVM system. Initially one have to verify their biometrical and they allowed vote in election. The basic idea of this project is to create an electronic voting machine that will help to eradicated fading of the manual voting system. The SEVM employs a user-friendly interface that allows voters to cast their ballots electronically, reducing the potential for human error and improving the overall voting experience. The system maintains a secure database of eligible voters, preventing fraudulent voting and ensuring that each person can vote only once. The core innovation of this system lies in the integration of facial recognition technology. Before casting their votes, voters are required to have their faces scanned by the Raspberry Pi's camera. The system then verifies their identity against the stored database, ensuring that only eligible voters can participate. This adds an extra layer of security to the voting process and minimizes the risk of identity fraud. The SEVM also offers real-time monitoring and reporting capabilities, enabling election officials to track voter turnout and detect irregularities. The results are securely stored and can be quickly tabulated, reducing the time required to announce the election outcomes. The SEVM system combines traditional electronic voting with state-of-the-art facial recognition to ensure secure and transparent elections. The proposed project displays transparency and also carries the feature of being autonomous during the course of operation*

Keywords: Raspberry PI, Electronic Voting Machine, Face Recognition, Artificial Intelligence

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