

Raspberry Pi Voting System, a Reliable Technology For Transparency in Democracy

Abstract:

Voting process takes the significant part of democratic systems. In most of the developing countries, paper ballot method is still being used. Information technology also has offered significant advantages and facilities to improve the quality of voting process. Digital recording electronic systems are developed replacing paper ballots. Although this is a great advancement, this process is prone to tampering threats and electoral frauds. This paper presents a new voting process which makes use of Raspberry Pi which has improved reliability and transparency over currently used systems. This system employs biometric identifiers in pursuit of authenticity. Pre collected details of all the voters in the country will be maintained as a central database by the government. This data is rechecked at the time of voting to ensure the identity of voters. Usage of Raspberry Pi for web casting the complete voting process and time to time display of polling percentage etc., details will tremendously affect the reliability of the process. Transparency and minimum usage of personnel is achieved at a cheaper cost and simpler process with this Raspberry Pi and its peripherals.