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| **Title:** | Development of a Secured and Low-budget Biometric Electronic Voting Machine for Bangladesh | | |
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| **Abstract:** |  |
| One of the fundamental goals of `Digital Bangladesh ' is ensuring people's democracy, human rights, transparency, and delivering government services through the maximum use of modern technologies. However, Bangladesh Election Commission is still striving to implement Electronic Voting Machines (EVM) in the parliamentary general election on an extended scale due to the lack of acceptance concerning EVM accuracy, easy accessibility, and security. This paper describes an implementation of a low-budget and securely accessible solution for the Electronic Voting Machine feasible for Bangladesh with the benefit of verifying the registered voters with a central database through a biometric identification process and maintaining the secrecy of the voters. The proposed system uses low profile microcontrollers (Arduino Uno), which reduces the device's cost to approximately half of the price of other available versions of EVM. The system can communicate with the database to store voter information and vote counts that make the system secure against any fraudulence during the election process and eliminate manual vote tallying problems. | |