

# Smart Voting System using Face Recognition

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**Abstract:** *All democratic governments are defined by elections, in which the people are able to express their preferences and ideas by casting their ballots. The voting process has developed from basic handwritten ballots to internet voting platforms in leaps and bounds throughout the years. The goal of this project is to develop a facial recognition voting system that would enable every Indian voter to vote from "ANYWHERE IN INDIA" at the closest polling station. High-level biometric security is maintained via the implementation of this project. A database on a server has all of the voter information. There must be an individual standing in front of a computer with a camera reading their picture before they can begin voting. Once the data has been read, the serial port on the microcontroller is used to communicate it to the web application. The person database is managed by the web application software. The "smart voting system" confirms that a person's vote has been recorded after he or she casts it, and if he or she attempts to vote again using his or her face sample, the web page will show that he or she is unable to cast a ballot. Afterwards, the election commission may examine the results and reset the votes, and it can also update the candidate results annually.*

**Keywords:** Face Recognition, Webpage, Database, Bimetric

## REFERENCES

- [1]. X. Zhao, E. Dell'andrea and L. Chen, "A People Counting System Based on Face Detection and Tracking in a Video," 2009 Sixth IEEE International Conference on Advanced Video and Signal Based Surveillance, 2009, pp. 67-72, doi:10.1109/AVSS.2009.45.
- [2]. N. R. Borkar and S. Kuwelkar, "Real-time implementation of face recognition system," 2017 International Conference on Computing Methodologies and Communication (ICCMC), 2017, pp. 249-255, doi: 10.1109/ICCMC.2017.8282685.
- [3]. Das, M. Wasif Ansari and R. Basak, "Covid-19 Face Mask Detection Using TensorFlow, Keras and OpenCV," 2020 IEEE 17th India Council International Conference (INDICON), 2020, pp. 1-5, doi: 10.1109 /INDICON 49873.2020.9342585.