

# A Novel Hybrid Voting System Using Machine Learning

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**Abstract:** *In this proposed system a facial and fingerprint recognition-based technique is implemented. This technique uses computer vision and machine learning algorithms for the recognition of faces. The goal is to make the voting process safe, secure and easy to use. This system will eliminate the need for voting booths and electoral votes. The system will also be much more helpful for the voters because they don't need to stand in a long queue to cast their vote. The proposed system uses an Android mobile phone to capture the user photo and the python server in the backend performs facial recognition. The system is much safer than the traditional system and also saves money which is usually spent during the election process. It also eliminates the need for human resources and time for managing the voting system.*

**Keywords:** Voting System, Facial and Fingerprint recognition, Machine learning, Android mobile

## REFERENCES

- [1]. Abbas Behrainwala, Amar Saxena, Ishika Navlani, Sakshi Sahay, Noshir Tarapore, Smart voting system using facial recognition International Journal for Research in Applied Science & Engineering Technology (IJRASET). ISSN 2321-9653, Volume 10 Issue 1 Jan 2022.
- [2]. Chandra keerthi pothina, Atla Indu Reddy, Ravikumar C V, Smart voting system using Facial Detection International Journal of Innovative Technology an Exploring Engineering (IJITEE), ISSN:2278-3075, Volume-9, Issue-6 april 2020.
- [3]. Girish H S, Gowtham R, Harsha K N, Manjunatha B, Smart Voting System International Research journal of engineering Technology (IRJET), ISSN:2395-0072, volume:06, Issue 05 MAY 2019.
- [4]. Mahalakshmi Mabla Naik, Dr. Preethi N Patil, Smart Voting Through Face Recognition, International Journal of Creative Research Throghts (IJCRT)
- [5]. Nadar Rajkani Pau, raj, G Rajagopalan, M Rajesh, S.V Kiruthika, I Jasmine A/P International Journal of Innovative Technology an Exploring Engineering (IJITEE), ISSN:2278-01081, NCIECC-2017 Conference proceeding.
- [6]. Rajesh M, Ghadi, Priyanka, Shelar, online voting system.
- [7]. Rudrappa B, Gujanatti 2015, A fingerprint print based voting system, International Journal of engineering Research & Technology (IJERT).
- [8]. Shah D H, Shah D J and Shah D T V, 2014, The Exploration of Face Recognition Techniques, International Journal of Application or Innovation in Engg and management (IJAIEEM).
- [9]. Smita Khainar, Reena Kharat, survey on secure online voting system.
- [10]. Sun Y, Chen X, Rosato M and Yin L 2010 Tracking vertex flow and model adaptation for 3-dimensional spatiotemporal face analysis, IEEE Transactions on systems, Man and Cybernetics-part: Systems and Humans 40(3), pp.461-474.
- [11]. Varshita K S, Nirmala Shivanand, Android Mobile based voting System through Facial Recognition.