

# A SURVEY ON VOTE FROM ANY CONSTITUENCY BASED ON BIOMETRIC AND FACIAL RECOGNITION USING BLOCK CHAIN

Prof. Rakshitha R<sup>1</sup>, Ashoka S G<sup>2</sup>, Mohammed Hannan Baig<sup>3</sup>,  
Guruprasad Gowda M P<sup>4</sup>, Yashwanth Kumar H S<sup>5</sup>

<sup>1</sup>Assistant Professor, <sup>2,3,4,5</sup>Students

Department of Computer Science and Engineering, Vidya Vikas Institute of Engineering and Technology, Mysore.

**Abstract:** In every election, the election commission is facing a series of troubles & different type of problems during the election. The most common problem faced by the election commission is inappropriate confirmation with respect to the arrangement of casting the votes, duplication or illegal casting of votes. In this paper, a secure and new voting system is developed to improve the existing voting system using fingerprint and facial recognition. Fingerprint is one of the most secure biometric of person identification along with facial recognition. The main goal of this paper is to recognize a better method which is highly efficient and accurate compared to the conventional methods.

**Keywords:** Fingerprints, Facial Recognition, Blockchain

## I. INTRODUCTION

Many types of voting system have been used around the world. Paper ballot voting system is an old & is unsecure where it is possible to fling multiple votes from same person. It runs to throw the vote with a ballot paper & a stamp. In electronic voting system, the process of election data is recorded, stored and preceded as digital information. Electronic voting system is used to fling vote as well as counting number of votes. Security is the important feature of existing voting systems. There is a lot of chances for bogus voting. Nowadays some politicians are following illegal method to succeed in the election. The traditional paper ballot & electronic voting systems need more manpower. To safeguard the security of voting system, we use Facial recognition, Fingerprints and Blockchain in proposed system. Fingerprints are used since it is highly unique, stable, cannot be duplicated and easily captured. The structure of the explanation is as follows. In literature study, includes theoretical contribution also investigation of current security devices and technologies. Also discusses the research and development methodology of the device in which we present our architectonic and design modules, the data transmitted in them. Existing examples of how our device operates and the statistics of efficiency. Also finally, concludes the paper.

## II. LITERATURE SURVEY

The Previous work done in this domain involves reviewing the already present algorithms & assessment of these algorithms based on various features & conditions such as the kind of database used, and neural network-based image processing system used for the identification of the facial features. The amount of distortion & attenuation plays a big role in producing a clear and transparent image in a localized

area of the image frequency as it would be vital feature while capturing the image & processing of it to accurately match it with one that is present in the database.

2.1 Electronic Voting System using Blockchain Raghavendra Ganji, Yatish B N Consultants, DELL EMC

In this paper, they proposed an electronic voting system using multi-chain. They showed how multichain can be configured to restrict transactions to only one vote between voter and contestant. A new entity – trusted third party – was introduced to keep the voting secret. Without this organization its not possible to maintain voter anonymity and whom the voter votes for. This is also necessary to avoid forgery of votes by either the Election Commission or trusted third party. They established a workflow between authentication organization, trusted third party and multichain ledger. In the end, they showed how auditing can ensure authenticity of the entire system.

2.2 Confidential E-Voting System Using Face Detection and Recognition

Aanjana Devi.S, Dr.Palanisamy.V and Anandha Jothi.R  
Department of Computer Applications, Alagappa University, Karaikudi.

Numerous online voting system and methods are studied related to E-Voting using biometrics. From the study they proposed a secure Electronic voting system using biometrics technique with face detection and recognition. This provide robust and reliable user friendly encoded secure system for E-Voting which allow the recognized voter to cast their votes through mobile phone as well as through PC connected in network. Here Eigen face algorithm and viola jones are suggested to provide highly secured, more reliable and robust E-Voting System. According to this paper it also improves efficiency of the system and it provide user friendly environment for voters to cast their valuable votes.

2.3 Smart Voting System Support through Face Recognition Swetha M S, Shreejwol Disti, Raman Shah, Dr.Thungamani M  
Department of Computer Science and Engineering  
BMS Institute of Technology and Management, Yelahanka, Bangalore.

According to this paper the existing voting system has many defects such as lengthy process, time taking, not secure, bogus voting, no security level. Their approach is secure from the existing system. Since, they are using three level of

security in this proposed system the false voters can be easily identified. The facial authentication method is very useful in recognizing the fraud voters, so we can avoid the bogus votes during election commission. According to this paper the voters can cast their voting from anywhere by login to their proposed smart voting system through internet. As every operation is performed through internet connectivity so, they mentioned it as onetime investment for government. Voting is important than the location of voters. As data is stored in centralized storage so, accessing data at any time as well as backup of the data is possible. This smart voting system provides updated result at each and every minute. Also requires less man power and resources. Every year the database needs to be updated or every election.

2.4 Mobile Voting Using Finger Print Authentication Vijay Jumb, Jason Martin, Phyllis Figer, Aniket Rebello. This paper offers the voters to cast easily through internet. Vote counting is also made easy by the mobile voting system since its just a matter of quering the dtabase, Mobile voting system is used by a number of countries today. Developing a good system is important to the success of the system to prevent system failures and to gain wide acceptance as the best method available. A good mobile voting system requires ten characteristics which this system already has. In analyzing, designing, implementing, and maintaining standards, they considered these characteristics as the foundation. According to this paper if these standards were made national. Mobile voting system will be an affordable, & less time consuming technique once a system exhibiting national standards & the above mentioned characteristics is implemented.

2.5 Biometric based Electronic Voting System using Aadhar Naveenraj M, Arun AC, Gowtham A, Laleth TR, Naveen Kumar G

This paper conveys that the technology development of voting system and summarizes that it has recovered all the possibilities of rigging. Once the polling machine is programmed even the manufacturer cannot reprogram because it is one time programmable. In conventional method the polling & result announcement may take long period but in this type of polling system takes a short period of time for result announcement. This method increases the estimate of results, the belief of people among the voting system increases and the election commission of India makes a step ahead to use this type of polling machine for people welfare. The main advantage of this method according to them is we can vote in India at any location using our UIDAI.

### III. CONCLUSION

Voting system using biometric is a prototype Evolution to using finger print module & Facial recognition system. As the need for voting system has started to increase and some countries has started to find for the solutions, this can be the starting point to improve & deploy in the real world conditions. In this system we have tried to explain the importance of biometric technique. It is rival properties & its use areas. We must to keep in mind that voting is not the only process during the complete voting procedure. For

considerations there might be other security concerns when such an application is built for practical reasons. Proposes a biometric-based design that finds out such challenges and preserves transparency, secrecy & anonymity along with other important services, using techniques.

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