iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 11 **Issue:** V **Month of publication:** May 2023

DOI: https://doi.org/10.22214/ijraset.2023.53041

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 11 Issue V May 2023- Available at www.ijraset.com

Vote Now Application

Harshal Meshram[1], Tushar Rana[2], Amit Kumar[3], Vishal Baburao Harak[4], Prof. S.S Shinde[5]
[1, 2, 3, 4, 5]*Department of Information Technology, Smt.Kashibai Navale College of Engineering, Pune*

Abstract: ***The "Vote Now" application is an online e-voting system that aims to provide a more efficient and secure way to vote. The system includes multiple layers of verification, including face recognition and finger verification, to ensure the reliability of the device. Additionally, the application includes a location-free voting system that allows voters who are unable to come to the voting location to cast their vote from their hometown. This system eliminates the time-consuming and paper-based process of the traditional manual voting system and provides a more secure and authenticated voting experience. The proposed system is an Android-based application and implements the Haar Cascade algorithm for individual authentication. The "Vote Now" application offers a modern and efficient voting experience while ensuring the security and reliability of the system.***
Keywords: Face Recognition, Haar Cascade Algorithm, Finger Verification, E-voting , Polling application.

I. INTRODUCTION

The primary objective of this system is to develop an online voting system that will assist in eradicating fraud perpetrated by the manual voting system and earlier versions of online voting that utilized a camera for Face Recognition and finger verification.
We are also implementing a location-free voting system for voters who are unable to vote in person at their home town.
To guarantee the device's reliability, we propose a system with multiple layers of verification, including face and finger verification with validation data. The system can only be accessed by each voter who has been identified and verified by the provided database of enroll voters. The voter will be permitted to proceed with selecting their preferred candidate from the panel once the corresponding face matches the information provided.

II. AIM/ MOTIVATION

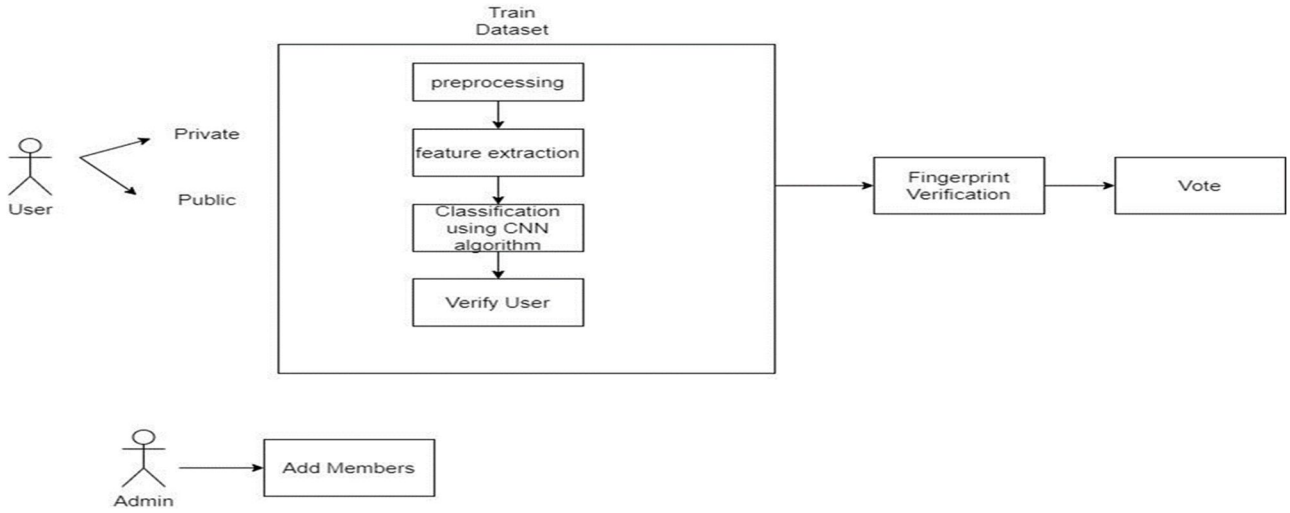
Electronic democratic innovation means to speed the counting of voting forms, decrease the expense of paying staff to count casts a ballot physically and can give further developed openness to impaired citizens. Additionally in the long haul, costs are supposed to diminish. It is possible to report and publish results faster.

III.BACKGROUND OR NEED OF THE PROJECT

Online voting system is a voting system in which the election data is recorded, stored and processed primarily as digital information and it needs to address, obtain, mark, deliver, and count ballots via computer.

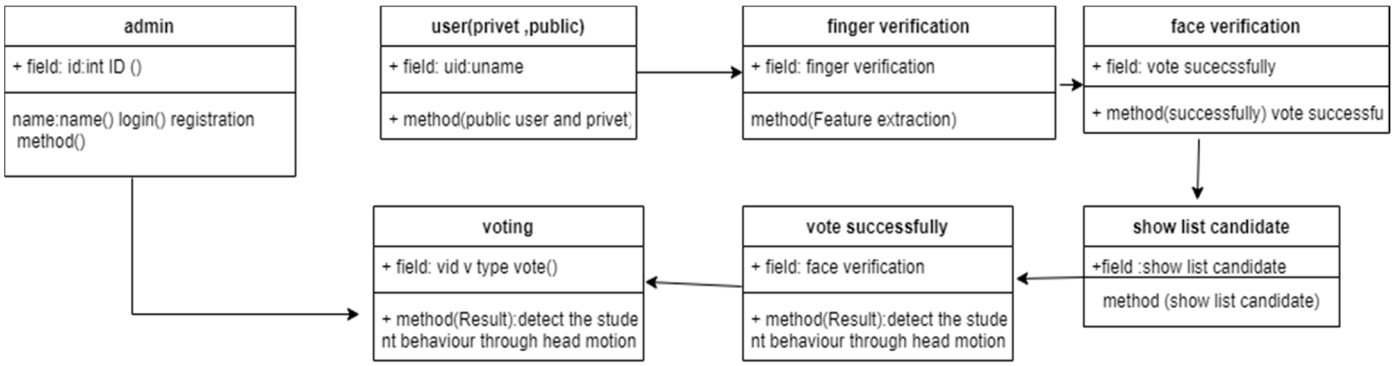
IV. FIGURES AND TABLES

A. System Architecture

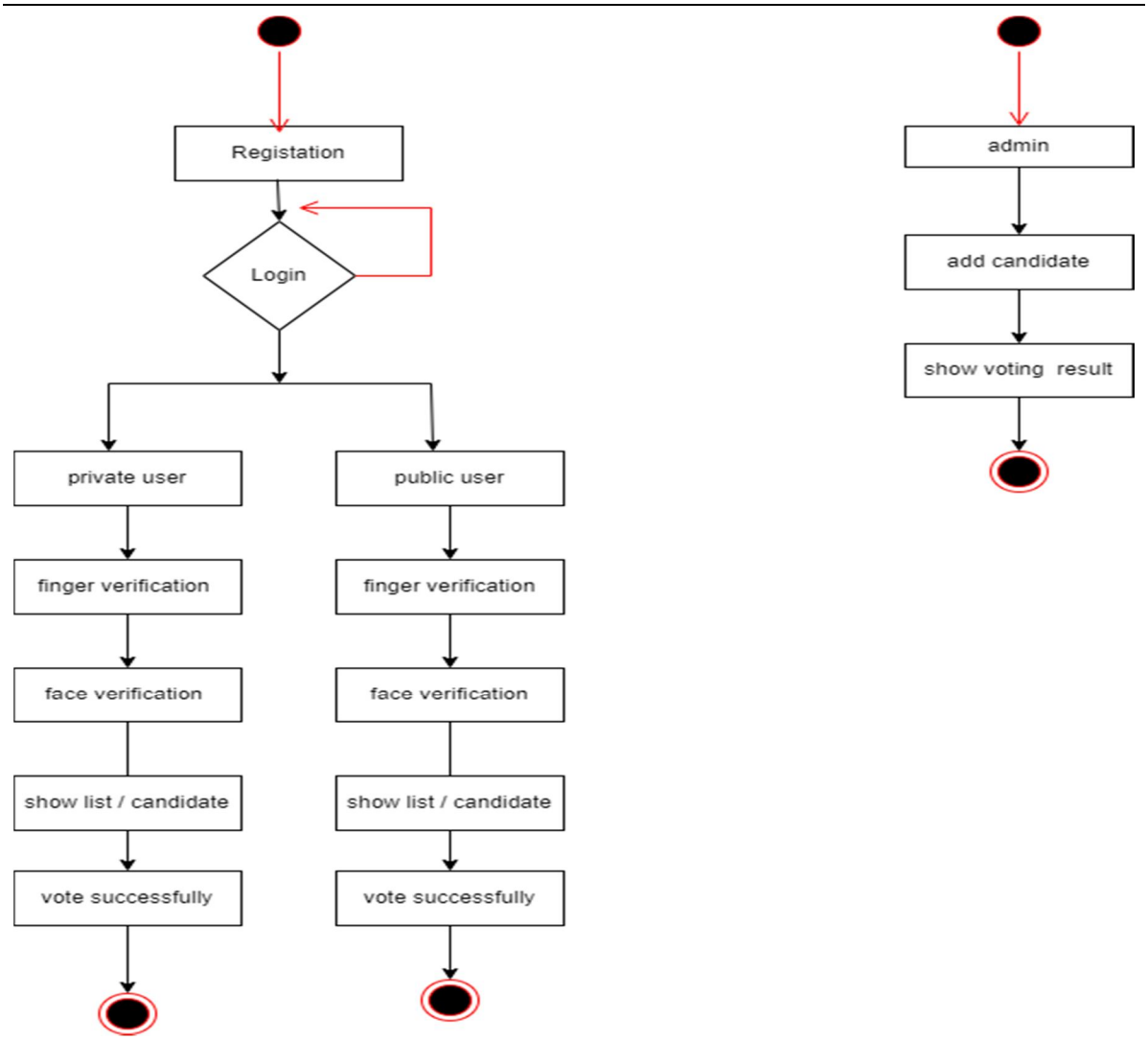


©IJRASET: All Rights are Reserved

B. Class Diagram

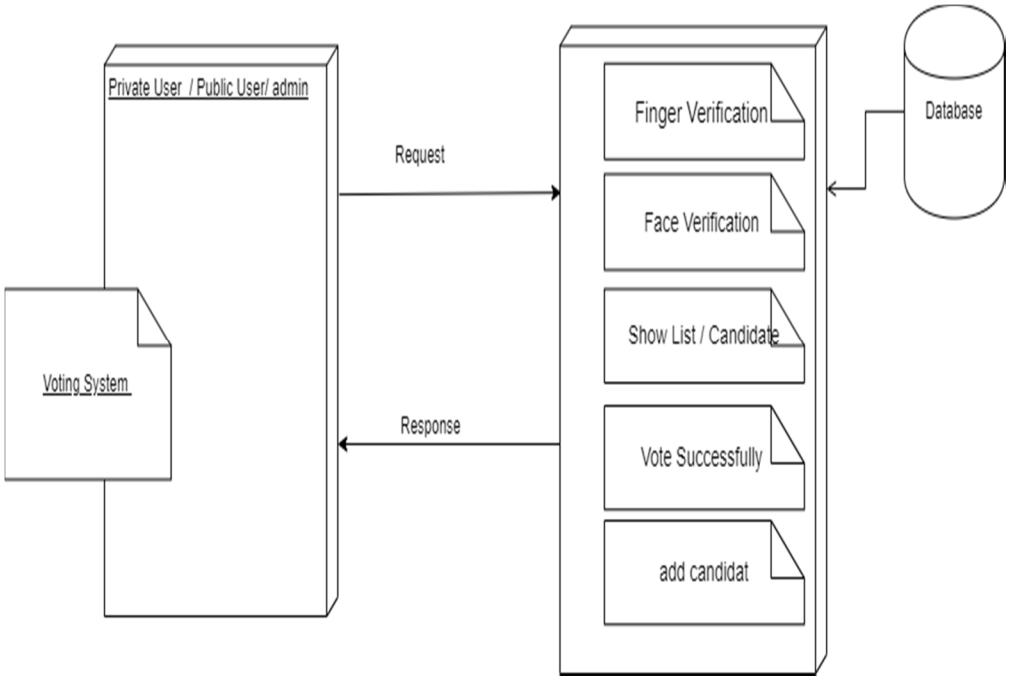


C. Activity Diagram

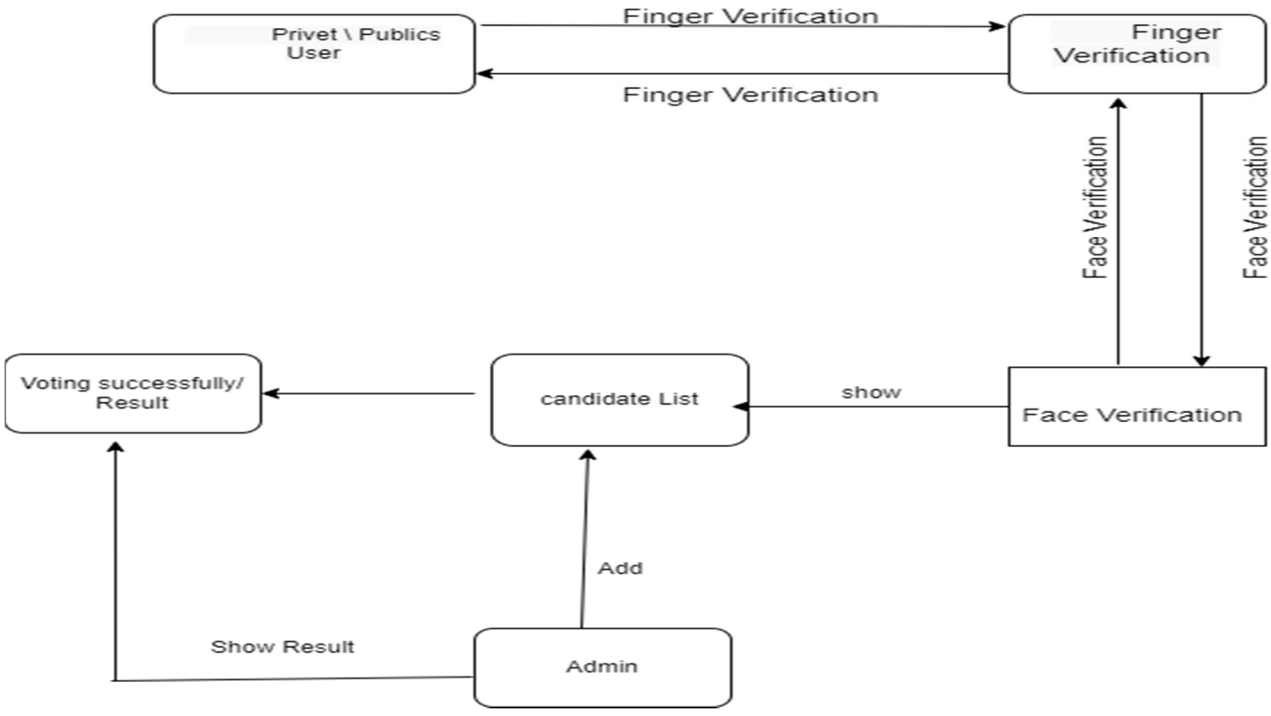


ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 11 Issue V May 2023- Available at www.ijraset.com

D. Deployment Diagram



E. Collaboration Diagram



V. ALGORITHM

Haar Cascade is a computer vision algorithm used for object detection. It uses a set of features called Haar features, which are simple rectangular filters that calculate the difference between the sum of pixel values in adjacent rectangular regions of an image. These Haar features are used to create a classifier, which can detect whether an object is present in an image. The Haar Cascade algorithm has many practical applications, including face detection, object tracking, and gesture recognition.

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |

VI. METHODOLOGIES

The methodology involves collecting positive and negative images, training the model using machine learning algorithms such as AdaBoost, testing the model's accuracy on validation images, and using the trained model for object detection in new images. The algorithm works by sliding a classifier over different regions of an image and comparing the features of each region to the trained model. If the features match the model's characteristics, the region is identified as containing the object of interest. Haar Cascade is widely used in many applications, including face detection, object tracking, and gesture recognition.

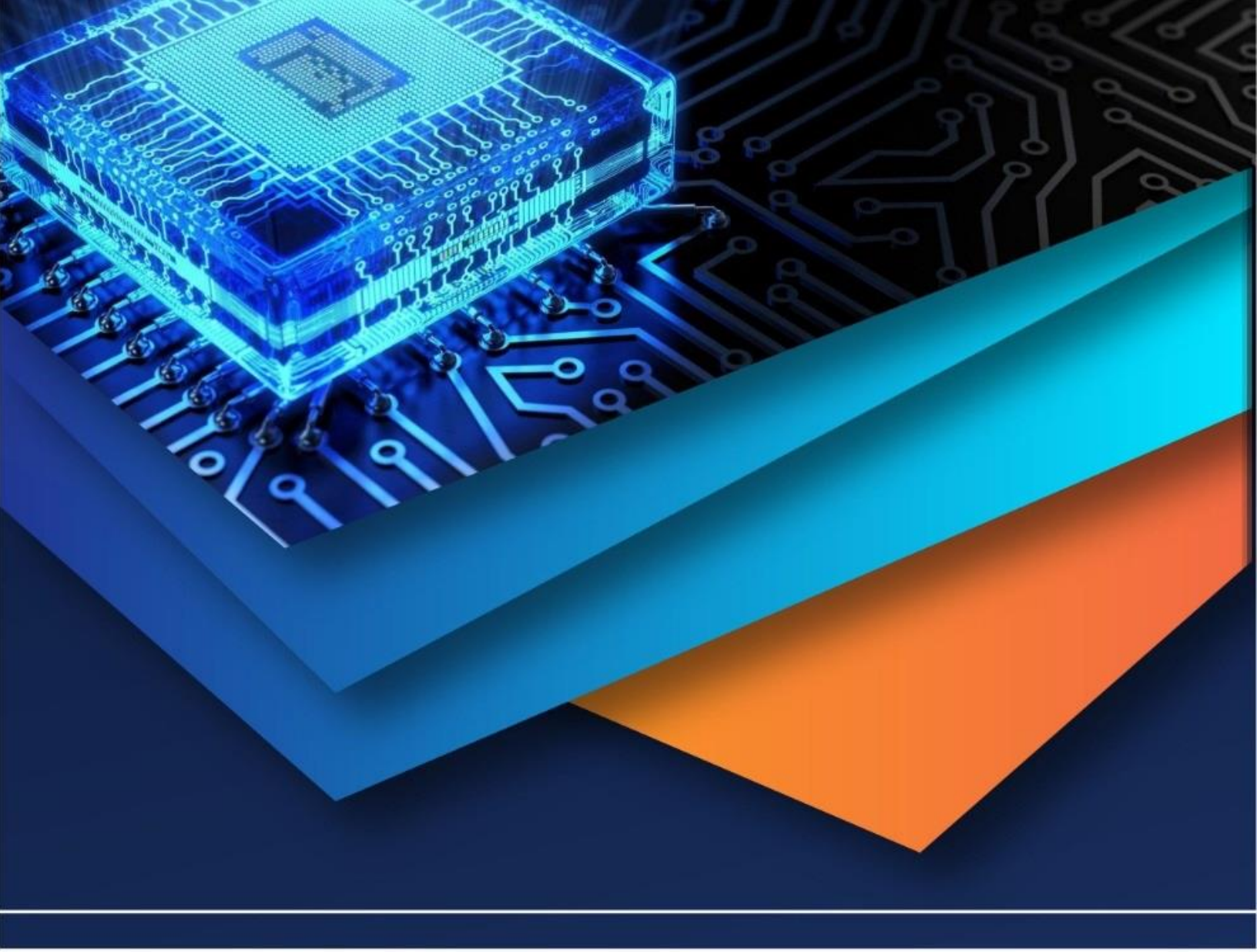
VII. CONCLUSIONS

Our proposed solution is android based with which allows the voter to register and he/she can vote from anywhere irrespective of the location. This system provides security and also avoid casting of the multiple vote by same person. This system is more reliable in which we can vote from multiple locations. It also minimizes work, human requirements and time resources.

REFERENCES

[1] Prof. KritiPatidar, Prof. Swapnil Jain "Decentralized EVoting Portal Using Blockchain .
[2] Prof. Shashank S Kadam, Ria N Choudhary, SujayDandekar, DebjeetBard- han, Namdeo B Vaidya "Electronic Voting Machine with Enhanced Security
[3] RahilRezwan, Huzaifa Ahmed, M. R. N. Biplob, S. M. Shuvo, Md. Abdur- Rahman "Biometrically Secured Electronic Voting Machine"
[4] Z.A. Usmani, KaifPatanwala, MukeshPanigrahi, Ajay Nair "Multipurpose plat- form independent online voting system.
[5] Ravikumar CV.—Performance analysis of HSRP in provisioning layer-3 Gate- way redundancy for corporate networks ||, Indian Journal of Science Technology. Vol 9, issue 20, 2016.
[6] Ashwini Mandavkar, Prof. Rohini Agwane, "Mobile based facial recognition using OTP verification for voting system", 2015 IEEE, IACC, pp. 644-649.
[7] Himika Parmar, Nancy Nainan, Sumaiya Thaseen, "Generation of secure one- time password based on image authentication", CS IT-CSCP 2012, pp. 195- 206.
[8] Hongyu Zhang., Qianzi You, and Junxing Zhang (2015), 'A lightweight elec- tronic voting scheme based on blind signature and kerberos mechanisms', International conference on advanced networks and telecommuncations systems,pp.978- 4799.
[9] Herb Deutsch (2005), 'Public opinion's influence on voting system technol- ogy', IEEE Standards Association.
[10] Anandaraj S., Anish R., and Devakumar P.V. (2015), 'Secured electronic vot- ing machine using biometric', IEEE International conference on innovations in information, embedded and communication systems.

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)