

Iris Recognition and Smart Card Based Secure Voting System

G Aswani¹, Dr. S. Rinesh², N. Deepa³

¹Department of Computer Science and Engineering, Saveetha Institute of Medical and Technical Sciences, Chennai, India

²Assistant Professor, Department of Computer Science and Engineering, Saveetha School of Engineering Saveetha Institute of Medical and Technical Sciences, Chennai, India

³Assistant Professor, Department of Computer Science and Engineering, Saveetha School of Engineering Saveetha Institute of Medical and Technical Sciences, Chennai, India

¹aishureddy75@gmail.com, ²rineshs.sse@saveetha.com, ³ndeepa.sse@saveetha.com

Article Info

Volume 82

Page Number: 10531 - 10534

Publication Issue:

January-February 2020

Article History

Article Received: 18 May 2019

Revised: 14 July 2019

Accepted: 22 December 2019

Publication: 19 February 2020

Abstract

Bangladesh is just one of the countries in which brought the voting machine in legislative as well as setting up surveys. But in each election, the election fee is encountering a lot of difficulties and different designs of issues at some stage in the election. The maximum familiar trouble dealt with making use of the political election charge is inappropriate confirmation for the association of casting the ballots, replication or prohibited casting of votes. In this paper, a safe, as well as brand-new voting device is progressed to boost the here and now voting system the use of smartcard as well as iris recognition. The main goal of this e-newsletter is to keep away from the replication of casting votes.

Keywords- Protect as well as Effective, Privacy-Preserving, Public Bookkeeping Plan, and Cloud Storage.

1. Introduction

Voting machines might be a central authority selection system in each autonomous country. Meant to permit people to vote freely and voting is that the proper of every population of an autonomous nation. The democratic federal government depends upon the consequences of the election. The uses of laptop computers, the internet, as well as electronic devices are boosting day with day. The security maker is furthermore updating day using the day to be required to upgrade the traditional balloting equipment and besides security. The necessary goal of this text is to widen a substitute concept approximately balloting machines and also

make sure the safety of it. To kind certain the safety of the ballot device, we utilize iris popularity in the recommended machine, is remarkably one-of-a-kind, steady, can't be copied and simply caught.

2. Literature Survey

Khalid pillar of Islam [1] prepared a strategy persecution Cloud Computing to Execute a Safety And Security Overlay Network. This suggests a general cloud-based

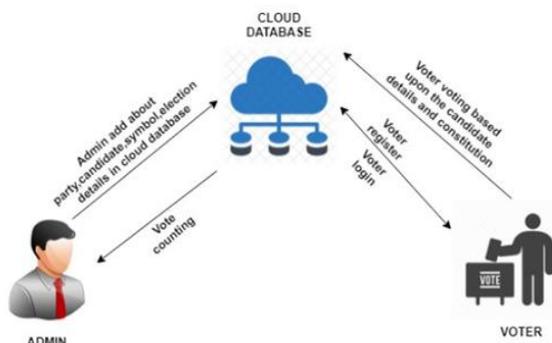
Security overlay network that will certainly be used as a clear overlay network to give solutions like breach discovery systems,

antivirus, and anti-spam code, and dispersed denial-of-service interference.

Kleber Vieira [2] planned a technique Intrusion Detection for Grid as well as Cloud Computer Providing protecting during a dispersed system needs fairly individual authentication with passwords or digital certifications and also privacy in detail transmission. The Grid and also Cloud Computer Intrusion Detection System integrates information and also behavior analysis to view invasions.

Seung Shin [3] Network safety and security observation mistreatment Open Flow in dynamic cloud networks. In this paper, we have a bent to propose a fresh structure, Cloud Viewer that offers monitoring services for huge and also vibrant cloud networks. This framework mechanically detours network additionally, of these procedures is enforced by composing a very easy plan manuscript, thus, a cloud network manager is throughout a setting to safeguard. We have got enforced the planned structure and also reviewed it on absolutely different check network environments.

System Architecture



3. Problem Statement

An one-of-a-kind disadvantage presented throughout the strategy of public bookkeeping for shared expertise within the cloud may be a thanks to protect identification personal privacy from the TPA, as a results of the identities of

endorsers on common expertise could indicate that a selected customer within the cluster or a special block in shared knowledge could be a much better important target than others. Nevertheless, no existing device within the literature is during a position to perform public bookkeeping on common knowledge within the cloud whereas it still protective identity privacy. During this paper, we often tend to recommend a fresh privacy-protective public auditing mechanism for shared understanding in the associate untrusted cloud. Right here, we tend to make use of ring trademark so as that the third-party auditor is during a position to verify the stability of common understanding for a bunch of individuals while not obtaining the whole expertise-- whereas the identity of the endorser on every block in shared knowledge is unbroken non-public from the TPA.

4. Existing System

To securely introduce a reliable 3rd party auditor (TPA), the following 2 basic needs got to be met: TPA needs to be all set to effectively investigate the cloud knowledge storage. While not hard the native duplicate of information, and introduce no additional online burden to the cloud user. The third-party bookkeeping approach need to inaugurate no brand-new vulnerabilities in the direction of user. CLOUD computing has been visualized as a result of subsequent generation info modern technology (IT) style for business, as a result of its lengthy checklist of extraordinary benefits within the IT history: on-demand self-service, existing network accessibility, area freelance resource merging, speedy source property, usage-based appraisal as well as transfer of danger.

5. Proposed System

First of all, we evaluate the iris database from the open-end credit scores. There on time, the

voting record of a citizen is also examined. If the voting document suggests the voter offers vote after that he/she cannot leave voting. If the voting record reveals that the citizen cannot supply ballot after that capture the citizen iris photo by utilizing the iris scanner electronic camera. Match the caught iris picture and clever card iris image database the usage of a hamming range. If the iris picture isn't matched to the open-end credit database after that stop the approach. On the other hand, if the iris photo is matched to the smart card database then enable the citizen to supply a vote and also change the ballot paper of the voter.

6. Conclusion

With the expanding populace day by day, the development of a ballot device is important. Undoubtedly the proposed ballot device is methods that are in certain excellent. We have utilized iris track record and open-end debt for improving this machine. Many biometric methods are to be had yet iris online reputation has too much accuracy price. Using the smart card, it is probably to ballot from any booth instead of the distinct cubicle. The iris sample of the individual or lady is manifestly special. It minimizes the polling time which is maximum important. It most definitely guidelines out the threat of a void ballot.

7. Future Enhancement

In the future, we've used iris affirmation moreover, smart cards for improving this technique. Different biometric systems are open yet iris affirmation has a high exactness quantity. Running the sensible card, it's possibly getting of review maintain every looking into hinder instead of the actual evaluating edge. The iris diaphragm situation peculiar to people is uncommon. A propensity to decreases the assessing minute whatever acts usually

substantial. Draw altogether blocks abrupt potential customers related to the consumptive survey.

References

- [1] K. Ramya Devi and J.V.Vidhya," SURVEY ON SECURE ELECTRONIC VOTING SYSTEM", International Journal of Pharmacy & Technology (IJPT), Vol. 9, April-2017.
- [2] Asif Ahmed Anik, RayeesaJameel, Abul Farah Anik, NowrozeAkter, "Design of a solar power Electronic Voting Machine",
- [3] Proceedings of 2017 International Conference on Networking, Systems and Security (NSysS),5- 8 Jan. 2017,Dhaka, Bangladsh.
- [4] Htet Ne Oo, Aye Moe Aung,"Design and formal analysis of electronic voting protocol using AVISPA", Proceedings of 2017 2nd
- [5] International Conference for Convergence in Technology (I2CT), 7-9 April 2017, Mumbai, India.
- [6] Supeno Djanali, Baskoro Adi Pratomo, Karsono Puguh Nindyo Cipto, Astandro Koesriputranto, Hudan Studiawan, "Design and development of voting data security for electronic voting (E-Voting)", Proceedings of 2016 4th International Conference on Information and Communication Technology (ICoICT), 25-27 May 2016, Bandung, Indonesia.
- [7] ZuyinaAyuningSaputri, AmangSudarsono, Mike Yuliana, "E-voting security system for the election of EEPIS BEM president", 2017 International Electronics Symposium on Knowledge Creation and Intelligent Computing (IES-KCIC), 26-27 Sept. 2017, Surabaya, Indonesia.
- [8] NouredineCherabit, FatmaZohraChelali, Amar Djeradi," Circular Hough Transform for Iris localization" Science and Technology, p- ISSN: 2163-2669, e-ISSN:

- 2163-2677, 2(5): 114-121, 2012.
- [9] Krzysztof Misztal, Emil Saeed, Jacek Tabor, and Khalid Saeed, "Iris Pattern Recognition with a New Mathematical Model to Its Rotation Detection", Human Identification by Vascular Pattern (pp.43-65), November 2012.