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# **Credit Card Fraud Detection and Biometric Securities**

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**Abstract:** Now a day the usage of credit cards has dramatically increased. As credit card becomes the most popular mode of payment for both online as well as regular purchase. This also increases

Number of frauds associated with many transactions. So, to detect all these types of frauds in the case of faulty transaction requires more time. Some Biometric securities are provided in this project and those securities act as a precaution

For the faulty transaction. Iris scanning, Retina Scanning are those biometric securities to provide

Primary and secondary security.

## **I. INTRODUCTION**

Now a days the usage of credit cards has dramatically increased. As credit card becomes the most popular mode of payment for both online as well as regular purchase. This also increases number of frauds associated with many transactions. We model the sequence of operations in credit card transaction processing using a Hidden Markov Model (HMM) and show how it can be use for the detection of frauds.

An HMM is initially trained with the normal behavior of a cardholder. If an incoming credit card transaction is not accepted by the trained HMM with sufficiently high probability, it is consider to be fraudulent. At the same time, we try to ensure that genuine transactions are not rejected. We present detail experimental results to show the effectiveness of our approach and compare it with other techniques available in literature. So, to detect all these types of frauds in the case of faulty transaction requires more time. Some Biometric securities are provided in this project and those securities act as a precaution For the faulty transaction. Iris scanning, Retina Scanning are those biometric securities to provide

### *A. Existing System*

In case of the existing system the fraud is detected after the fraud is done .people get to know after the fraud has been occurred. now a days lot of online purchases are made so we don't know the person who is using the card online, we just capture the IP address for verification purpose. So there need a help from the cyber crime to investigate the fraud. To avoid the entire above disadvantages we propose the system to detect the fraud in a best and easy way.

### *B. Proposed System*

In proposed system, we present Model Which does not require fraud signatures and yet is able to provide various types of securities. The details of items purchased in Individual transactions are usually not known to any Fraud Detection System (FDS) running at the bank that issue credit cards to the cardholders. An FDS runs at a credit card issuing bank. If model confirms the transaction to be of fraud, it displays it on LCD, and the issuing bank declines the transaction

## **II. LITERATURE SURVEY**

Iris Scanning – A Literature review about the Author Olivia Moran is training specialist who specialises in E-Learning instructional design and is a certified Moodle expert. She has been working as a trainer and course developer for 3 years to develop and deliver the training courses for traditional classroom, blended learning and E-learning. Biometrics, Iris Scanning: A Literature Review was written as a part of the group collaboration.

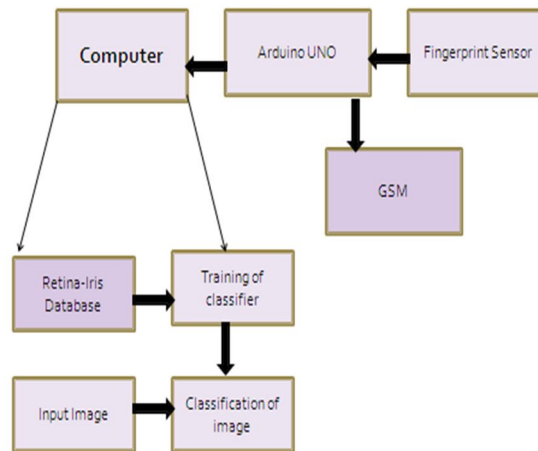
Ghosh and Reilly have proposed credit card fraud detection with a neural network. They have built a detection system which is trained on a large sample of credit card account transactions. These transactions contain examples of fraud cases due to lost cards, stolen cards, application fraud Counter- feit fraud, mail-order fraud, and non received issue (NRI) fraud. Recently, Syeda have used parallel granular neural networks (PGNNs) for improving the speed of data mining and knowledge of discovery process in credit card fraud detection. A complete system has been implemented for this purpose.

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### III. PRESENT METHODOLOGY

Credit card fraud detection System is a simple and powerful concept which uses biometric sensors for credit card fraud detection. By using this system, manual work has removed. The main advantage of this system is to reduce the fraud detection. The introduction of credit card fraud detection, the algorithm further reduces the fraud chances overall.

### IV. SYSTEM BLOCK DIAGRAM



#### A. System Workflow

- 1) Start
- 2) Insert the card number, password and username.
- 3) Check if it is a valid account then send OTP on user's number.
- 4) Insert OTP number.
- 5) If matches then go for biometric securities.
- 6) Enter Iris and Retina database and fingerprint impression.
- 7) If pattern match then, transaction occurs successfully
- 8) Else display message that "transaction is failed"
- 9) Account does not exist.
- 10) Stop

### V. RESULTS

When considering the implementation of such a system, it is important to keep in mind data related with the user is already provided to the model in the database and expected result of is the user is authentic or not is displayed on screen.

### VI. FUTURE SCOPE

Proposed system can be used for extra level of banking such as Locker system and security system. Over the years, we have seen steady upward growth of biometric technology across the globe for many reasons but mostly due to the fact that personal identification and authentication is considered more and more important. Because of immigration it is difficult to identify the criminals and the practical use of biometrics are growing rapidly.

Many businesses consider biometrics to be applicable for government use. still they are learning the applications of biometrics and it has been extend widely. we will discuss the top 5 uses of biometric technology across the globe and places where the technology is used to create more security and convenience for every citizen.

### VII. CONCLUSION

The proposed method is evaluated on the other databases. It is shown that the proposed method outperforms all the compared state-

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of-the-art and baseline algorithms, which illustrates the robustness of the proposed method against the appearance in the variations of expressions, lighting etc. The proposed method hopefully can inspire a new thinking and new way to tackle the iris recognition problem.

### VIII. ACKNOWLEDGMENT

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### REFERENCES

- [1] Credit Card Fraud Detection Using Hidden Markov Model by Abhinav Srivastava, Amlan Kundu, Shamik Sural, Senior Member, IEEE, and Arun K. Majumdar, Senior Member, IEEE
- [2] Syeda. M. Zhang, Y. Q. and Pan. Y., 2002 Parallel Granular Networks for Fast Credit Card Fraud Detection, Proceedings of IEEE International Conference on Fuzzy Systems, pp.572-577 (2002).



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