

# **ANALYSIS ON CREDIT CARD FRAUD DETECTION METHODS**

## **ABSTRACT:**

Due to the rise and rapid growth of E-Commerce, use of credit cards for online purchases has dramatically increased and it caused an explosion in the credit card fraud. As credit card becomes the most popular mode of payment for both online as well as regular purchase, cases of fraud associated with it are also rising. In real life, fraudulent transactions are scattered with genuine transactions and simple pattern matching techniques are not often sufficient to detect those frauds accurately. Implementation of efficient fraud detection systems has thus become imperative for all credit card issuing banks to minimize their losses. Many modern techniques based on Artificial Intelligence, Data mining, Fuzzy logic, Machine learning, Sequence Alignment, Genetic Programming etc., has evolved in detecting various credit card fraudulent transactions. A clear understanding on all these approaches will certainly lead to an efficient credit card fraud detection system. This paper presents a survey of various techniques used in credit card fraud detection mechanisms and evaluates each methodology based on certain design criteria.

## **EXISTING SYSTEM**

- The Traditional detection method mainly depends on database system and the education of customers, which usually are delayed, inaccurate and not in-time.
- After that methods based on discriminate analysis and regression analysis are widely used which can detect fraud by credit rate for cardholders and credit card transaction.
- For a large amount of data it is not efficient.

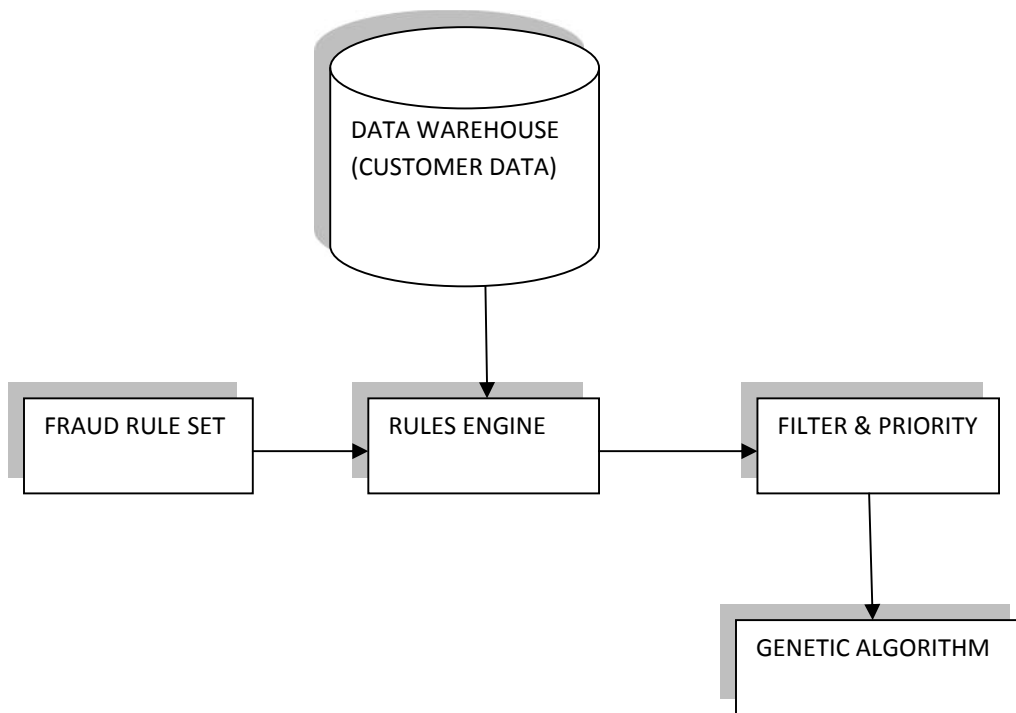
## **DRAWBACKS OF EXISTING SYSTEM:-**

- The high amount of losses due to fraud and the awareness of the relation between loss and the available limit have to be reduced.
- The fraud has to be deducted in real time and the number of false alert has to be minimized.

## PROPOSED SYSTEM

- The proposed system overcomes the above mentioned issue in an efficient way. Using genetic algorithm the fraud is detected and the false alert is minimized and it produces an optimized result.
- The fraud is detected based on the customers behavior. A new classification problem which has a variable misclassification cost is introduced.
- Here the genetic algorithms is made where a set of interval valued parameters are optimized.

## SYSTEM ARCHITECTURE



## **SYSTEM SPECIFICATION:-**

### **HARDWARE REQUIREMENTS**

- SYSTEM : Pentium IV 2.4 GHz
- HARD DISK : 40 GB
- MONITOR : 15 VGA colour
- MOUSE : Logitech.
- RAM : 256 MB
- KEYBOARD : 110 keys enhanced.

### **SOFTWARE REQUIREMENTS**

- Operating system : Windows XP Professional
- Front End : JAVA
- Tool : Net Beans IDE