**SYSTEM ANALYSIS:**

**EXISTING METHOD**

There are lots of issues that make this procedure tough to implement and one of the biggest problems associated with fraud detection is the lack of both the literature providing experimental results and of real world data for academic researchers to perform experiments on. The reason behind this is the sensitive financial data associated with the fraud that has to be kept confidential for the purpose of customer’s privacy. Now, here we enumerate different properties a fraud detection system should have in order to generate proper results:

The system should be able to handle skewed distributions, since only a very small percentage of all credit card transactions is fraudulent.

There should be a proper means to handle the noise. Noise is the errors that is present in the data, for example, incorrect dates. This noise in actual data limits the accuracy of generalization that can be achieved, irrespective of how extensive the training set is.

Another problem related to this field is overlapping data. Many transactions may resemble fraudulent transactions when actually they are genuine transactions. The opposite also happens, when a fraudulent transactions appears to be genuine.

The systems should be able to adapt themselves to new kinds of fraud. Since after a while, successful fraud techniques decreases in efficiency due to the fact that they become well known because an efficient fraudster always find a new and inventive ways of performing his job.

There is a need for good metrics to evaluate the classifier system. For example, the overall accuracy is not suited for evaluation on a skewed distribution, since even with a very high accuracy; almost all fraudulent transactions can be misclassified.

**DISADVANTAGES:**

* The most of existing methods has ignored the poor quality images like images with noise or poor brightness.
* Less accuracy.

**PROPOSED MEHOD:**

A proper and thorough literature survey concludes that there are various methods that can be used to detect credit card fraud detection. Some of these approaches are:

 Artificial Neural Network

 Bayesian Network

 Neural Network

 Hidden Markov Method

 Genetic Algorithm

In our research paper, as stated earlier, we will be emphasizing on the Genetic algorithm and how it is used in credit card fraud detection systems.

**ADVANTAGES:**

* High accuracy is obtained and time consumption for detecting the shape.
* More datasets are included.
* We can find the medical application also.