## **ABSTRACT**

The project is mainly focused on credit card fraud detection in real world. A phenomenal growth in the number of credit card transactions, has recently led to a considerable rise in fraudulent activities. The purpose is to obtain goods without paying, or to obtain unauthorized funds from an account. Implementation of efficient fraud detection systems has become imperative for all credit card issuing banks to minimize their losses. One of the most crucial challenges in making the business is that neither the card nor the cardholder needs to be present when the purchase is being made. This makes it impossible for the merchant to verify whether the customer making a purchase is the authentic cardholder or not. With the proposed scheme, using random forest and Xgboost algorithm the accuracy of detecting the fraud can be improved. Classification process of random forest and Xgboost algorithm to analyze data set and user current dataset. Finally optimize the accuracy of the result data. The performance of the techniques is evaluated based on accuracy, sensitivity, and specificity, and precision. Then processing of some of the attributes provided identifies the fraud detection and provides the graphical model visualization. The performance of the techniques is evaluated based on accuracy, sensitivity, and specificity, and precision. Xg boost algorithm got highest accuracy then random forest.

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## LIST OF ABBREVIATIONS

S.NO	STANDARD NAME	FULL FORM	PAGE NO
1	SVM	Support Vector Machine	5
2	RAM	Random Acess Memory	8
3	NFR	Non-Functional Requirement	9
4	UML	Unified Modeling Language	12
5	WWW	World Wide Web	24
6	GUI	Graphical User Interface	25