

## ANALYSIS AND RESEARCH ON CREDIT CARD FRAUD DETECTION BASED ON MACHINE LEARNING

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### ABSTRACT

*With the rapid development of socialist economy, there are many financial payment tools in our life, such as various credit cards issued by financial institutions. Although its emergence has brought us a lot of convenience, but at the same time there are certain disadvantages. In recent years, the crime of credit card swindler is increasing year by year. In view of whether there is a fraud in the credit card, this paper uses SMOTE algorithm to balance the unbalanced data. Again using Logistic regression analysis algorithm, XGBoost algorithm respectively, KNN algorithm with UCI data set Default of credit card clients data analysis and research, found that under the unbalanced data sets of different accuracy of classification algorithms, among them, XGBoost algorithm and KNN algorithm have higher accuracy results and are suitable for the classification of this data set.*

**KEYWORDS:** Credit Card Fraud