Karnatak Law Society's

# GOGTE INSTITUTE OF TECHNOLOGY

UDYAMBAG, BELGAUM-590008.

## DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

## "Credit Card Fraud Detection using Distributed Data Mining Agents"

(SPONSORED BY KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY, BANGALORE)

A Project Report
Submitted in Partial Fulfillment of Requirements for the award of the Degree of Bachelor of Engineering in Information Science & Engineering of Visvesvaraya Technological University, Belgaum.

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# *ABSTRACT*

*Credit card fraud is a wide-ranging term for theft and fraud committed using a credit card to obtain goods without paying, or to obtain unauthorized funds from an account. Credit card transactions continue to grow in number leading to a higher rate of stolen account numbers and subsequent losses by banks. The problem here is to be able to correlate the data seen at the various probes and discover patterns in the global data seen at all the different probes.*

*Using DDM we minimize the amount of data shipped between the various sites essentially, to reduce the communication overhead and preserve the privacy. The long response time, lack of proper use of distributed resources and fundamental characteristics of centralized data mining algorithm do not work well in distributed environment. DDM technology has emerged which overcomes these limitations. Distributed Data mining is useful for identifying patterns and trends from large quantities of databases.*

*In recent years agents have become a popular paradigm in searching and retrieving; Agents are autonomous, flexible and provide intelligence. Embedding agents in the current data mining processes and tools aid in detecting the fraudulent patterns. In our project work we have taken the best of both the worlds of DDM as well as agents to mine large quantity of transaction data and detect frauds.*

**Keywords:** *DDM (Distributed Data Mining), Agents*