Abstract

With the evolution of distributed computing, the databases are inherently distributed across the globe and therefore data analysis from various data sources is very essential in decision making. The core need in the current industrial environment is hence to extract information from the huge, complex and dynamic data through data mining techniques. Integrating data from multiple data sources and analysing the large, complex dynamic data is a tedious and
complex work. Additionally, database consists of inconsistent and noisy data. Further, with the decrease in quality of data to be mined the quality of knowledge model obtained from it also decrease which inturn affects the decision making process. However optimization of data preprocessing can resolve the aforementioned issues. This paper provides design and development of data preprocessing software, based on intelligent agents. This software enables data preprocessing operations to be performed in an automated mode, and gives accurate results in lesser time when compared to manual data preprocessing.

References

- Peng Jin, Yun-Long Zhu And Kun-Yuan Hu. August, 2007 A Clustering Algorithm For Data Mining Based On Swarm Intelligence Proceedings Of Sixth International Conference On Machine Learning Cybernetics, Hong Kong, 19-22
- Cristian Aflori and Florin Leon 2008: "Efficient Distributed Data Mining using Intelligent Agents Authors&";
- Usama Fayyad, Gregory Piatetsky-Shapiro, and Padhraic Smyth 2005: "From Data Mining to Knowledge Discovery in Databases&
- I. A. Mohtar, 2006 "Multiagent Approach to Stock Price Prediction,&" University Kebangsaan, Malaysia.
- C. Li, and Y Gao, 2006 "Agent-based pattern mining of discredited activities in public services,&" Proceedings of the 2006 IEEE/WI C/ACM International Conference on Web Intelligence and Intelligent Agent Technology.
- Sharon Christa, K. Lakshmi Madhuri and V. Suma 2012, "A Comparative Analysis of Data Mining Tools in Agent Based Systems&", International Conference on Systemics, Cybernetics and Informatics
An Effective Data Preprocessing Technique for Improved Data Management in a Distributed Environment

- Ranjit Bose, Vijayan Sugumaran 1998, "IDM: An Intelligent Software Agent Based Data Mining Environment," IEEE.
- Dr. Joseph P. Bigus, Jennifer Bigus, "Constructing Intelligent Agents with JAVA."