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
- Pyle, D. 1999 Data Preparation for Data Mining. Morgan Kaufmann Publishers, Inc. , San Francisco, CA, USA
- C. , Lavrac, N. , Moyle, S. , Kavsek, B. 2001Integrating Aspects of Data Mining, Decision Support and Meta-Learning: Internal SolEuNet Session, ECML/PKDD&apos;01 workshop notes 43–52
- Cristian Aflori and Florin Leon 2008: &quot;Efficient Distributed Data Mining using Intelligent Agents Authors&quot;.
- Usama Fayyad, Gregory Piatetsky-Shapiro, and Padhraic Smyth 2005: &quot;From Data Mining to Knowledge Discovery in Databases&quot;.
- I. A. Mohtar. 2006 &quot;Multiagent Approach to Stock Price Prediction,&quot; University Kebangsaan, Malaysia.
- P. Nurmi, M. Przybilski, G. Linden, and P. Floreen, 2005 &quot;An architecture for distributed agent based data pre-processing. &quot; Pp. 122-132.
- C. Li, and Y Gao, 2006&quot;Agent-based pattern mining of discredited activities in public services,&quot; Proceedings of the 2006 IEEE/WI C/ACM International Conference on Web Intelligence and Intelligent Agent Technology.
- Dr. T. R. Gopalakrishnan Nair, Lakshmi Madhuri, Sharon Christa, Dr. V. Suma, 2012 &quot;Data Preprocessing Model Using Intelligent Agents&quot; International Conference on Information Systems Design and Intelligent Applications.
- Sharon Christa, K. Lakshmi Madhuri and V. Suma 2012, &quot;A Comparative Analysis of Data Mining Tools in Agent Based Systems&quot;, International Conference on Systemics, Cybernetics and Informatics
- 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;"

**Index Terms**

Computer Science

Hpc Applications

**Keywords**

Discretization Agent  Transformation Agent