Abstract

Data mining is an extraordinarily demanding field referring to extraction of implicit knowledge and relationships, which are not explicitly stored in databases. Agent paradigm presents a new way of conception and realizing of data mining system. The purpose is to combine different algorithms of data mining to prepare elements for decision-makers, benefiting from the possibilities offered by the multi-agent systems. While the emerging field of privacy preserving data mining (PPDM) will enable many new data mining applications, it suffers from several practical difficulties. PPDM algorithms are difficult to develop and computationally intensive to execute. Developers need convenient abstractions to reduce the costs of engineering PPDM applications. The individual parties involved in the data mining process need a way to bring high-performance, parallel computers to bear on the computationally intensive parts of the PPDM tasks. This paper discusses the comparative study between multi agent based data mining and high-performance privacy preserving data mining. This paper offers a detailed analysis of the agent framework for data mining and its overall
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architecture and functionality are presented and also challenges in developing PPDM algorithms with existing frameworks, and motivates the design of a new infrastructure based on these challenges.

Reference

- M. Naor and B. Pinkas, “Oblivious transfer and polynomial evaluation,” in STOC ’99:


- H. Baazaoui Zghal, S. Faiz, and H. Ben Ghezala, “A Framework for Data Mining Based Multi-Agent: An Application to Spatial Data” In World Academy of Science, Engineering and Technology 5 2005

- Jimmy Secretan, Anna Koufakou, Michael Georgiopoulos, “APHID: A Practical Architecture for High-Performance, Privacy-Preserving Data Mining”

Index Terms

Computer Science

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Key words

Privacy-Preserving Data Mining

Distributed Data Mining

Cluster Computing

multi-agent