Abstract

Data mining services require accurate input data for their results to be meaningful, but privacy concerns may influence users to provide spurious information. To preserve client privacy in the data mining process, a variety of techniques based on random perturbation of data records have been proposed recently. One known fact which is very important in data mining is discovering the association rules from database of transactions where each transaction consists of set of items. There are many approaches to hide certain association rules which take the support and confidence as a base for algorithms ([1, 2, 6] and many more). This research work
discusses privacy and security issues that are likely to affect data mining projects. This research work focuses on further investigating reconstruction-based techniques for association rule hiding, the problem of sharing sensitive knowledge by sanitization and hope that proposed solution will fetch up the new reconstruction-based research track and work well according to the evaluation metrics including hiding effects, data utility, and time performance.

References

- Vi-Hung Wu, Chia-Ming Chiang, and Arbee L.P. Chen, Senior Member, IEEE Computer Society Hiding Sensitive Association Rules with Limited Side Effects IEEE TRANSACTIONS ON KNOWLEDGE AND DATA ENGINEERING, VOL. 19, NO.1, JANUARY 2007
Privacy-Preserving Data Sharing Using Data Reconstruction Based Approach


Index Terms

Computer Science

Keywords

Frequent Item sets  Data Mining  Cursors  Association Rules