Abstract

The security of the large database that contains certain decisive information, it will become a serious issue when sharing database to the network against unauthorized access. Specifically consider a scenario in which two parties owning confidential databases wish to run a data mining algorithm on the merger of their databases, without revealing any unnecessary information. Our work is motivated by the need to both protect privileged information and enable its use for business or other purposes. Privacy preserving data mining technique is a new research area in data mining and statistical databases where mining algorithms are analyzed for the side effect they acquire in data privacy. Association rule hiding is a worthwhile technique for protecting confidential data and crucial information in a database. Data modification techniques, query auditing methods, statistical techniques are developed and used for protecting the database. Many optimization techniques also used with the data mining concept for protecting the data base. In this paper using ant colony optimization technique with association rule mining for hiding sensitive items in large data base.
Privacy Preserving Data Mining based on Ant Colony Optimization

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- Bikramjit Saikia, Debkumar Bhowmik "Study of Association Rule Mining And different hiding Techniques"; Department of computer Science Engineering, National Institute of Technology, Rourkela.
- Charu C. Aggarwal IBM T. J. Watson Research Center, USA and Philip S. "Privacy Preserving Data Mining: Models and algorithms"; Yu University of Alllinois at Chicago, USA.
- Nada M. A. Al Salami "Ant Colony Optimization Algorithm"; Rakesh Agrawal, Tomasz Imielinski, Arun Swami "Mining Association Rules between sets of items in Large Databases"; IBM Almaden Research Center, San Jose, CA 95120.
- Vittorio Maniezzo, Luca Maria Gambardella, Fabio de Luigi "Ant colony optimization";

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