Abstract

Cryptography is to become familiar with the requirement of large, complex, information rich data sets for it’s privacy preservation. The privacy preserving data mining has been generated; to go through the concept of privacy in data mining is hard. Several algorithms and approaches are being generated theoretically, but practically it is hard. Privacy in data mining can be achieved through several techniques such as Perturbation, Anonymization and Cryptographic. Here in this paper tries to reiterate several Privacy Preserving Data Mining (PPDM) techniques presently developed to cope up with the privacy issues in the process of data mining. In this paper there is a survey of various cryptographic & non-cryptographic techniques too.

References

3. SHEN Yangguang, SHAO Hui, YANG Li. Privacy Preserving c4.5 algorithm over vertically
4. P J MODI, P W T KIM. Classification of Examples by Multiple Agents with Private
5. S Mukherjeea, M Banerjeea, Chen Zhiyuan, A privacy preserving technique for
distance-based classification with worst case privacy guarantees[J]. Data & Knowledge
7. Ivan Damgard and Yuval Ishai. Constant-round multiparty computation using a black-
University, 2010.
A practical implementation of secure auctions based on multiparty integer
10. Martin Burkhart, Mario Strasser, Dilip Many, and Xenofontas Dimitropoulos. SEPIA:
privacy-preserving aggregation of multi-domain network events and statistics. In Proc. of
11. Dahlia Malkhi, Noam Nisan, Benny Pinkas, and Yaron Sella. Fairplay - secure two-party
12. Wilko Henecka, Stefan Kogl, Ahmad-Reza Sadeghi, Thomas Schneider, and Immo Wehrenberg. TASTY: tool for automating secure two-party computations. In Proc. of CCS '10,
Issues," Advances in Computer Science and Information Technology (ACSIT), Volume 1,
Number 2; November, 2014 pp. 4-8.
15. Ashish Chouhan and Dr.Anju Singh ,"Privacy Preserving Data Mining: A Survey on
82-92 (2015).
16. A. V. Evfimievski, R. Srikant, R. Agrawal, and J. Gehrke. Privacy preserving mining of
association rules. In Proceedings of the Eighth ACM SIGKDD International Conference on
Knowledge Discovery and Data Mining, pages 217–228, 2002
17. L. Franconi and G. Merola, Implementing Statistical Disclosure Control for Aggregated
Data Released Via Remote Access, Working Paper No. 30, United Nations Statistical
Commission and European Commission, joint ECE/EUROSTAT work session on statistical data
18. A. V. Evfimievski, J. Gehrke and R. Srikant, Limiting privacy breaches in privacy
preserving data mining, Proceedings of the Twenty-Second ACM SIGACT-SIGMOD-SIGART


Index Terms

Computer Science

Security

Keywords

Privacy, Privacy Preservation, Cryptography, Anonymization, Data Mining, Randomization.