Abstract

(PPDM) privacy preserving data mining is recent advanced research in (DM) data mining field; Many efficient and practical techniques have been proposed for hiding sensitive patterns or information from been discovered by (DM) data mining algorithms. (ARM) Association rule mining is the most important tool in (DM) data mining, that is considered a powerful and interested tool for discovering relationships between items, which are hidden in large database and may provide business competitors with an advantage, thus the hiding of association rules is the most important point in (PPDM) privacy preserving data mining for protecting sensitive and crucial data against unauthorized access; Many Practical techniques and approaches have been proposed for hiding association rules for (PPDM) privacy preserving data mining; In this paper the current existing techniques and algorithms for all approaches for (ARH) association rule hiding have been summarized.
17. J. Han, M. Kamber Data Mining: Concepts and Techniques University of Illinois at Urbana-Champaign / 2006 / pp5.
27. J. Han, J. Pei, Y. Yin, R. Mao,” Mining Frequent Patterns without Candidate Generation: A Frequent- Pattern Tree Approach", Data Mining and Knowledge Discovery, 8, 2004, pp. 53-87.
33. L. Guang-yuan, C. Dan-yang, G. Jian-wei” Association Rules Mining with Multiple Constraints” Procedia Engineering 15 (2011) 1678 – 1683
50. Y. Kumar Jain, V. Kumar Yadav, G. S. Panday “An Efficient Association Rule Hiding Algorithm for Privacy Preserving Data Mining” International Journal on Computer Science and Engineering (IJCSE) Vol. 3 No. 7 July 2011.
57. Nikunj H. Domadiya, “Hiding sensitive association rules to maintain privacy and data


60. M. SakenianDehkordi, and M. NaderiDehkordi " Introducing an algorithm for use to hide sensitive association rules through perturb technique" Journal of AI and Data Mining, Published online. Accepted 18 January 2016.


69. J. Vaidya, C. Clifton “Privacy Preserving Association Rule Mining in Vertically Partitioned Data” SIGKDD ’02 Edmonton, Alberta, Canada Copyright 2002 ACM 158113567.

70. J. Vaidya, C. Clifton “Secure Set Intersection Cardinality with Application to Association Rule Mining” Department of Computer Sciences Purdue University 250 N University St West Lafayette, IN 47907-2066 March 15, 2004

71. S. Zhong, “Privacy preserving algorithms for distributed mining of frequent item sets” Information Sciences 177 (2007) 490–503


74. S. Z. Alborzi, A. Raj, and M. H. Saraee, “Privacy Preserving Mining of Association Rules
on Horizontally distributed Databases" IPCSIT vol. 41 (2012).


Index Terms

Computer Science Information Sciences

Keywords

(DM) Data Mining; (PPDM) Privacy Preserving Data Mining; (ARM) Association Rules Mining; (ARH) Association Rules Hiding; (MST) minimum support threshold; (MCT) minimum confidence threshold; (SE) Side Effects; and (SAR) Sensitive Association Rules.