Abstract

In various distributed data mining settings, leakage of the real data is not adequate because of privacy issues. To overcome this problem, numerous privacy-preserving distributed data mining practices have been suggested such as protect privacy of their data by perturbing it with a randomization algorithm and using cryptographic techniques.

In this paper, we review and provide extensive survey on different privacy preserving data mining methods and analyses the representative techniques for privacy preserving data mining. We majorly discuss the distributed privacy preservation techniques which provide secure solutions using primitive operations of cryptographic protocols such as secure multi-party computation (SMPC), secret sharing schemes (SSS) and homomorphic encryption (HC).

References


Index Terms

Computer Science

Information Sciences

Keywords

Data mining, K-means clustering, Data privacy, Privacy preserving, Multiparty computation, Threshold Cryptography.