Abstract

Big Data is a complex collection of huge amount of data records, everything around us is a source of big data that is too broad and too complex. Big data is generated by traditional data processing applications are inadequate. Many challenges are there in Big Data, they includes analysis of data in big data, capturing of data, data curtain, searching, sharing of data record, storage of data, data transfer, visualization, querying with database, updation of database and information privacy. Privacy preservation can be managed properly in case of limited amount of data, but in case of huge amount of data that is “Big Data” privacy preservation is a very big issue. Many algorithms are discussed here to solve the privacy preservation issue, generally Anonymization, Notice and Consent, Differential Privacy methods are used to resolve the issue of privacy preservation, each method have its merits and demerits, any method is not fully comfortable to provide required level of privacy having less amount of burden. In this paper there is discussed an advanced k-anonymity algorithm with privacy key, unique key is generated automatically by privacy key generation mechanism at the time of data creation. Then the information is stored in the database with that key, thus, user data is much secure
than existing k-anonymity algorithm because of two level of security. The first level is by K-anonymity and the second is by privacy key.

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Index Terms

Computer Science

Algorithms

Keywords
Privacy Preservation in Big Data using K-Anonymity Algorithm with Privacy Key

Big Data; Anonymization; Notice and Consent; Differential Privacy; K-anonymity; K-anonymity with privacy key, Suppression, Generalization etc.