Abstract

The field of Preserving Privacy in Data Mining is gaining momentum in the recent times as the data sets are more open towards mining by organizations and academic institutes. Ensuring privacy of the data before publishing it to wider audience is always an open challenge. So far the research is more towards performing perturbation on relational data. The gaining popularity of Social Networks leads to new problems and challenges. Different methodologies have been proposed in an attempt to preserve the privacy of the published datasets for Social Networks. There have been many techniques evolved to exploit the perturbed data and get some sensitive knowledge for Social Network data as well. So on the process of ensuring more privacy, the data perturbation techniques also became complex and more distortive in nature. The Data Utility is level of usefulness of the distorted data. The study of data utility comes into play as the distortion level increases. A model has been proposed in this paper to perform pre perturbation analysis for measuring the data utility and using this as an input to choose the right methodology for achieving the data utility as well as maintaining the privacy of the social network datasets which are graph kind in nature.
References


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Index Terms

Computer Science Information Sciences

Keywords

Maximizing Data Utility, Privacy Preserving, Social Networks.