The K-Anonymity problem using graph theory

**Project Abstract**

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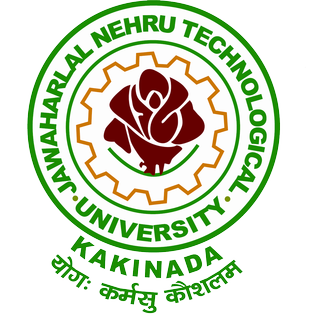
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**Abstract**

K-anonymity is a model to protect public released microdata from individual identification. It requires that each record is identical to at least k−1 other records in the anonymized dataset with respect to a set of privacy-related attributes. Although it is easy to anonymize the original dataset to satisfy the requirement of k-anonymity, it is important to ensure that the anonymized dataset should preserve as much information as possible of the original dataset. To minimize the information loss due to anonymization, it is crucial to group similar data together and then anonymize each group individually.

This work is based on graph theory. This Is a greedy algorithm that considers the actual table to be a graph with nodes as records and edges as information loss between the nodes. This algorithm minimizes the information loss by selecting the edges with lowest weights possible. It is scalable for multi-dimensional tables with large number of records too.

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