Abstract

In this paper is explored a way to reduce the rate of re-clustering and speed up the clustering process on categorical time-evolving data. This method introduces two algorithms: RDE (Replicated Data Elimination) and RCRDE. The RDE algorithm removes the successive surveys of replicated data and considers counters to keep this data. Hence, the number of created windows via the sliding window technique is limited and this leads to a decrease in the number of implementations of the clustering algorithm. The RCRDE algorithm based on MARDL (MAXimal Resemblance Data Labeling) framework decides about re-clustering implementation or modification of previous clustering results. The presented method is independent of the clustering algorithm's type and any kind of categorical clustering algorithm can be used. According to the results obtained on different data
sets, this method performs well in practice and facilitates the clustering implementation on categorical data. Also, this method can be utilized to cluster a very large categorical static database with higher quality than previous work.

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Index Terms

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