

## **Abstract**

The task of outlier detection is to find small groups of data objects that are exceptional when compared with rest large amount of data. In the problem of outlier detection in categorial data is define as an optimization problem and a local-search heuristic based algorithm (LSA) is presented. However as is the case with most iterative type algorithm. The *LSA* algorithm is still very time-consuming on very large dataset.

Fast Greedy algorithm can resolve the problem with time optimization in outlier detection, then the problem from LSA which very time-consming in very large dataset can resolved.

**Key words** : *outlier, outlier detection, LSA, Fast Greedy*