

## ABSTRACT

The notion of privacy in the access of information from the different public institutes and organizations had attained a significant concern in the recent times as the capability of statistical databases and online storing of information surpluses. The noble obligation to respect the individual's confidentiality aroused as a major issue while publishing sensitive information publicly. To meet the purpose various methods employing different heuristic have been proposed. The microaggregation protects the microdata by partitioning them into groups of at least  $k$  records in each groups and substituting the records in each group with the centroid of the group. An optimal microaggregation method tends to minimize the information loss incurring from this aggregation of microdata. This work presents a density-based microaggregation algorithm, DBM for microaggregation. The performance of DBM is compared to various latest existing methods for the similar purpose and experiments indicate that DBM reduces the information loss due to this aggregation. From our extensive experiment we can say that our proposed approach can provide better security with less information loss to some greater extent as compared with the existing approaches.

**Keywords:** Microaggregation, privacy-preserving,  $k$ -partition, density-based.