

# Abstract

## Fuzzy Clustering for Symbolic Data

most of the techniques used in the literature in clustering symbolic data are based on the hierarchical methodology, which utilizes the concept of agglomerative/divisive methods as the core of the algorithm. the main contribution of this paper is to show how to apply the concept of fuzziness on a data set of symbolic objects. to use this concept in formulating the clustering problem of symbolic objects as a partitioning problem. finally, a fuzzy symbolic c-means algorithm is introduced as an application of applying/testing the proposed algorithm on real/synthetic data sets. the results of the application of the new algorithm show that the new technique is quite efficient and, in many respects, superior to traditional methods of hierarchical nature