



RESEARCH ARTICLE

**AN ADAPTIVE PARTITIONAL CLUSTERING
METHOD FOR CATEGORICAL ATTRIBUTE
USING K-MEDOID**

A. Selvakumar¹

¹Assistant Professor of Computer Science, Dept. of Computer Science, Erode, Tamil Nadu, India

¹ deesel@rediffmail.com

Abstract— partitioning a large set of objects into homogeneous clusters is a fundamental operation in data mining. The operation is needed in a number of data mining tasks such as unsupervised classification and data summation as well as segmentation of large heterogeneous data sets into smaller homogeneous subsets that can be easily managed, separately modeled and analyzed. Clustering is a popular approach used to implement this operation. Partitional clustering attempts to directly decompose the data set into a set of disjoint clusters. More specifically, they attempt to determine an integer number of partitions that optimize as certain criterion function. The criterion function may emphasize the local or global structure of the data and its optimization is an iterative procedure. The intention to analyze the fact that partitional clustering algorithms performs efficiently for numerical attribute rather than categorical attribute. To analyze the algorithm best suits for a matrix data. They work with larger datasets with many attributes. For analysis the Iris dataset has been retrieved from UCI data repository and used in K-Medoid. The outcome of the algorithm is the partition of clusters which can also be visualized in graphical format. The cluster figures differentiate the cluster in various colors with the centroid measure distinctly. Finally it has been determined that K-Medoid is the better partitional algorithm.

Full Text: <http://www.ijcsmc.com/docs/papers/April2013/V2I4201336.pdf>