

## Abstract Details

**Title:** Enhancement of Clustering Mechanism

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**Abstract:** Cluster analysis or clustering is task of grouping a set of objects within in such a way that objects within same group (called a cluster) are more similar (in some sense or another) to each other than to those within other groups (clusters). It is a main task of exploratory data mining, & a common technique for statistical data analysis, used within many fields, including machine learning, pattern recognition, image analysis, information retrieval, bioinformatics, data compression, & computer graphics. Cluster is not one special algorithm, but commonly works to be solved. It could be achieved by various algorithms that differ significantly within their notion of what constitutes a cluster & how to efficiently find them. Popular notions of clusters include groups within short distances large cluster set, dense areas of data space, intervals or particular statistical distributions. Clustering could therefore be formulated as a multi-objective optimization problem. Appropriate clustering algorithm depends on individual data set & intended use of results. Cluster analysis as such is not an automatic task, but an iterative process of knowledge discovery or interactive multi-objective optimization that involves trial & failure. It is arrogant to update data pre procedure & model parameters until result achieves desired properties.

**Keywords:** Clustering Mechanism, Hierarchical Clustering, Density-reachability.