

ABSTRACT

This final task addressed in implementation a method to extract fuzzy information granules from multidimensional data, so a well-defined and clearly information will be derived. This method is Crisp-Double Clustering. Implementation of Crisp-Double Clustering method focussed on Fuzzy Granulation process i.e a process of gaining clusters that afterward quantified as fuzzy sets. This fuzzy sets used to help user in understanding multidimensional data. Crisp-Double Clustering method is one of the approach which is improvement of Double Clustering method.

Crisp-Double Clustering method involves two stages i.e Data Quantization and Prototype Clustering. Data Quantization uses vector quantization LBG (Linde-Buzo-Gray) algorithm to derive n-dimensional prototypes from multidimensional data. In prototype clustering stage, these n-dimensional prototypes will be projected along each dimension and then clustered using hierarchical clustering. The result is one-dimensional prototype that used to derive fuzzy information granules.

Keywords : Crisp-Double Clustering, Fuzzy Granulation, Vector Quantization, Clustering, Fuzzy Information Granules, Dimentions, Fuzzy Set, Prototype.