

Abstract

Clustering is one kind methodology that is used to solve data mining problem. Most of clustering algorithms just deal with crisp data. This condition is insufficient implemented in the real world problem. For example, in the case of customer profiling, a customer, based on his calling behavior is categorized only in residential or business customer. But in the real world problem, a customer could become resident and business customer in the same time. That's way, on this paper, fuzzy approach clustering will be used for clustering telecommunication's customer data so that we can see that a customer could become member from different cluster with a different membership function for each cluster. Fuzzy clustering algorithm that is used in this paper is fuzzy c-medoids algorithm (fcmed) which is used medoid (data point) as a cluster centre.

Keywords: *clustering, fuzzy clustering, fuzzy c-medoids, customer profile*