Abstract

Fuzzy logic is an organized and mathematical method of handling inherently imprecise concepts through the use of membership functions, which allows membership with a certain degree. It has found application in numerous problem domains. It has been used in the interval [0, 1] fuzzy clustering, in pattern recognition and in other domains. In this paper, we introduce fuzzy logic, fuzzy clustering and an application and benefits. A case analysis has been done for various clustering algorithms in Fuzzy Clustering. It has been proved that some of the defined and available algorithms have difficulties at the borders in handling the challenges posed in collection of natural data. An analysis of two fuzzy clustering algorithms namely fuzzy c-means and Gustafson Kessel Fuzzy clustering Algorithm has been analyzed.

References

An Analysis of Fuzzy Clustering Methods

10(2), pp. 144-154.
- http://fuzziness.org/fcm
An Analysis of Fuzzy Clustering Methods


Index Terms

Computer Science

Pattern Recognition

Keywords

Component; Fuzzy clustering Algorithms  Fuzzy C-means  Gustafson Kessel fuzzy clustering algorithm