Assessing h- and g-Indices of Scientific Papers using k-Means Clustering

K-means clustering technique works as a greedy algorithm for partition the n-samples into k-clusters so as to reduce the sum of the squared distances to the centroids. A very familiar task in data analysis is that of grouping a set of objects into subsets such that all elements within a group are more related among them than they are to the others. K-means clustering is a method of grouping items into k groups. In this work, an attempt has been made to study the importance of clustering techniques on h- and g-indices, which are prominent markers of scientific excellence in the fields of publishing papers in various national and international journals. From the analysis, it is evidenced that k-means clustering algorithm has successfully partitioned the set of 18 observations into 3 clusters.

References

Index Terms

Computer Science
Algorithms

Keywords

K-means clustering h-index g-index