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A Review on Euclidean Affinity Propagation clustering based on Information Passing

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Abstract: Affinity propagation (AP) is a one of the clustering method that can be used to identify the data points or clusters by sending messages between pairs of clusters. Euclidean Distance Algorithm is used to the group of an object and find the similarity method. To implement the Euclidean Distance Algorithm. Accuracy is a more direct measure to reflect the effectiveness of clustering algorithms it is used to calculate two the similarity values. Some other dynamic clustering problems are also of great importance. Finally, to apply the two ideas to other dynamic data clustering.

Keywords: component; formatting; affinity clustering, .Euclidean Distance Algorithm, Similarity, Accuracy.

I. INTRODUCTION

Clustering is defined as; it is a process of collecting number of data items into groups whose members are more like to each other than other members. Cluster analysis seeks to partition a given data set into groups based on specified features so that the data points within a group are more similar to each other than the points in different groups, Therefore, a cluster is a collection of objects that having more similarity between data items and dissimilarity between the data items that belongs to other clusters.

One of the clustering method is used that can identify the data center points or clusters by simply sending the messages between data points pairs is called as Affinity Propagation. Seed Affinity Propagation is one of the clustering algorithm which is depend on Affinity propagation

Affinity Propagation is used to the clustering problem. Two Clustering algorithms are proposed. Message passing from user to the server by using Clustering Algorithm. It evaluates the effectiveness of clustering algorithms by computing the mutual information between real cluster labels and the clustering results. Accuracy is a more direct measure to reflect the effectiveness of clustering algorithms. Euclidean Distance Algorithm is used to the group of an object. And find the similarity method.

To implement the Euclidean Distance Algorithm, it is used to calculate two the similarity values. Some other dynamic clustering problems are also of great importance. Finally, to apply the two ideas to other dynamic data clustering. Clustering as understood by me is the grouping of two or more servers so that their combined power can be utilized for enhanced performance as well as for providing better data storage. Find the similarity based on two images. Clustering data based on a measure of similarity is a critical step in scientific data analysis and in engineering systems. A common approach is to use the data to learn a set of centers such that the sum of squared errors between data points and their nearest centers is small.

Affinity Propagation is advanced algorithm which first find out the similarity between the pairs of data items that taken as a input as well as check all the data items called as exemplars. The proposition of IAPKM is inspired by combining *K*-Medoids and AP clustering, where AP clustering is good at finding an initial exemplar set and *K*-Medoids is good at modifying the current clustering result according to new arriving objects. AP algorithm can be used in this paper. Finding the similarity word sequence.

Two IAP clustering algorithms, IAPKM and IAPNA, are proposed. Five popular labeled data sets and real world time series are used to evaluate the performance of IAPKM and IAPNA. Experimental results validate the effectiveness of IAPKM and IAPNA Euclidean Distance Algorithm is used to the group of an object

II. Literature Review

This paper includes the detail study on Affinity propagation.

a) Affinity Propagation

Affinity propagation (AP) is an algorithm that collects the data items and then detects the exemplar data items that used for analysis and to summarization. In last 40-45 years ago, there are hundreds of clustering methods as well as algorithms are developed but Affinity propagation as compared to all these, find out the solutions in very less time and accurate with less errors

To learn exemplars a new and useful technique is Affinity Propagation The most important advantage is it is worked as a fast algorithm for large volumes of clusters also.

b) Euclidean Algorithm

Input: Two positive integer, a and b.

Output: The greatest common divisor, g, of a and b.

Internal computation

1. If a<b, exchange a and b.
2. Divide a by b and get the remainder, r. If r=0, report b s the GCD of a and b.
3. Replace a by b and replace b by r. Return to the previous step

III. Conclusion

In this paper, we consider how to apply Affinity Propagation in clustering task. Find the similarity method. First of all we, Insert an object. Thus, the object waiting for cluster. Similarity value is based on this Euclidean Distance Algorithm. It Calculate the similarity value between two grouping of an object and image distances. Some other dynamic clustering problems are also of great importance. To apply the two ideas to other dynamic data clustering. Finally retrieve the old and new clustering analysis.

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