A Distance Metric that Combines Linkage, Connectivity and Density Information for Clustering in Image Processing

Abstract

Rapid development in Internet technology has generated data at high velocity in large volume and variety. It needs newer methods of analysis. Combining traditional and popular methods with specialized techniques give interesting clustering outputs and are of much use in some real life applications. This paper suggests a new dissimilarity metric to handle complex data. It combines the linkage and density information of data together. Multi-dimensional scaling summarizes the data model based on the proposed distance metric to use it for image processing. The low dimensional model obtained after dimensionality reduction can be easily clustered using standard algorithms.

References

2. A. Rodriguez and A. Laio, “Clustering by fast search and find of density peaks”, Science,


Index Terms

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Clustering, Distance Metrics, Multi dimensional Scaling, Ensembling, density-based clustering, linkage, image processing