Abstract

As far as the Raaga Recognition process, most probably the significant and straightforward classifier in the arsenal or machine learning techniques is the Nearest Neighbour Classifier. The classification is achieved by identifying the nearest neighbours to a query example and using those neighbours to determine the class of the query. This approach to classification is of
K-Nearest Neighbour and Earth Mover Distance for Raaga Recognition

particular importance today because issues of poor run-time performance are not such a problem these days with the computational power that is available. This paper presents an overview of techniques for Nearest Neighbour classification focusing on: mechanisms for finding distance between neighbours using Cosine Distance (CD), Earth Movers Distance (EMD) and formulas are used to identify nearest neighbours, algorithm for classification in training and testing for identifying raagas. From the results it is concluded that Earth Movers Distance (EMD) is producing better results than Cosine Distance measure. Keywords--- Raaga, Cosine Distance( CD), Earth Movers Distance (EMD), K-NN

Reference

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**Index Terms**

Computer Science

Artificial Intelligence

**Key words**

Cosine Distance

Earth Mover Distance (EMD)

K-Nearest Neighbour