Abstract

Extracting useful information from the datasets of high dimension and representing the learnt knowledge in an efficient way is a challenge in knowledge discovery and data mining. Although many pattern recognition, knowledge discovery and data mining techniques are available in literature, there is a need for techniques that represent the high dimensional data in a low dimension by preserving useful information for supervised learning. In this work, we design a novel model which effectively captures both inter-feature and intrafeature relationships in the sample space for knowledge discovery by performing dimensionality reduction, using a modified version of multi-factor dimensionality reduction based algorithm. The model uses the learnt knowledge to quantify the similarity of a test sample with respect to a specific class. The evaluation of the model on Fisher

References

1. Marylyn D Ritchie Alison A Motsinger. Multifactor dimensionality reduction: An analysis

Index Terms
Keywords

Multifactor Dimensionality Reduction, Knowledge Discovery, Similarity Measure, Classification