Abstract

Support vector machine (SVM) is a recent method to classify the data. SVM has been proved as a powerful tool for solving classification problem. The problem with complex dataset incurs significant complexity while classifying and its efficiency also cost very much. We propose a reduced set support vector machine based on Eigen structure, to classify dataset having multiple features. In this paper, Eigen vectors use to present the whole data in reduced dimensions. This minimize the task of classification by propose method and cost is reduced while efficiency is improved with the increase complexity of data. The proposed method takes a random chunk of data followed by Eigen structure use to reduce the dimension of the data. So as classification problem solve efficiently. We have compared the proposed method with SVM and RSVM. The result signifies that the proposed method gives better result in comparison to
SVM and RSVM.

References


Index Terms

Computer Science

Information Science
Keywords
RSVM  SVM  Support Vector based on Eigen Structure.