ABSTRACT

High-dimensional data with small sample is a recurring problem in pattern classification applications. There have been many previous methods which have to deal with problems tersebt, but the results are still not optimal.

To solve this problem, a method that was proposed is Diskriminant Analysis Regularized Kernel (KRDA), which involves regularization method in the implementation. KRDA performance is highly dependent on the value of regularization parameter, where the value of appropriate regularization parameters value, problems in pattern classification applications, such as singularity and overfitting the uncorrelated discriminant analysis can be overcome. by solving these problems, it will produce an effective and efficient data discrimination with good classification accuracy.

Testing using several examples of datasets KRDA conducted to evaluate in terms of classification accuracy and strength.

Key words: analysis discriminant, kernel methods, regularization, singular value decomposition