FEATURE SELECTION BASED ON RELAXED LINEAR SEPARABILITY

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Abstract:

Feature selection problem appears where large number of features constraint effective data analysis and processing. Identification of the most important feature subsets is a crucial challenge in many important applications. For example, a basic question in bioinformatics which is identification of genes functionalities, can be formulated and answered as a problem of this kind. Identification of the most important feature subsets through minimisation of convex and piecewise-linear (CPL) criterion function is described and analysed in the paper. This approach is combined with relaxation of the linear separability assumption.

Keywords: feature selection, relaxed linear separability, CPL criterion function