

A New Approach for Improving Accuracy of Multi Label Stream Data

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Abstract : Many real world problems involve data which can be considered as multi-label data streams. Efficient methods exist for multi-label classification in non streaming scenarios. However, learning in evolving streaming scenarios is more challenging, as the learners must be able to adapt to change using limited time and memory. Classification is used to predict class of unseen instance as accurate as possible. Multi label classification is a variant of single label classification where set of labels associated with single instance. Multi label classification is used by modern applications, such as text classification, functional genomics, image classification, music categorization etc. This paper introduces the task of multi-label classification, methods for multi-label classification and evolution measure for multi-label classification. Also, comparative analysis of multi label classification methods on the basis of theoretical study, and then on the basis of simulation was done on various data sets.

Keywords : binary relevance, concept drift, data stream mining, MLSC, multiple window with buffer

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