

Abstract

Imbalance class represents imbalance class label distribution in number of dataset. In data mining, many research have been done to handle imbalance class problems, one of that is SMOTEBoost algorithm. SMOTEBoost is combines of SMOTE (Synthetic Minority Over-sampling Technique) algorithm with boosting technique. SMOTE algorithm create some of synthetic instant from minority class that caused minority class region larger. Boosting is one of technique that combine result of predict some different classifier.

In SMOTEBoost algorithm, it done oversampling with SMOTE algorithm and weighted to training data. Oversampling and the weighted done in each iterasi and by the end of iterasi will be done voting to result of predict from each iterasi.

Result of examination indicate that SMOTEBoost algorithm can increase predict true positif (increase recall) and boosting can minimalize false positif (increase precision) .

Keywords: Imbalance class, SMOTEBoost, voting, weighted, oversampling