Weak Pattern Theory

Classify any dataset with perfect accuracy! In this paper, I am going to propose a theory that can be used to classify a dataset to get the perfect accuracy. We know, strong always dominates the weak by nature. When we build a classifier from a dataset, the classifier represents the maximum examples, strong pattern, by dominating the other minor groups, weak patterns, of examples. So, the idea is that if we can separate the weak pattern examples from the dataset and build a different classifier then it is possible to achieve a perfect accuracy.

To verify the idea, I have used the Census Income Data Set where the accuracy of the dataset using a single classifier is low.

Preprocessing

Train dataset

Test Dataset

Build a classifier (***strong pattern classifier***)

Divide test dataset for SPC and WPC (***required additional preprocessing***)

Classify train data

Dataset for Weak Pattern classifier

Dataset for Strong pattern classifier

Separate wrong classified examples

Apply WPC

Apply SPC

Build ***weak pattern classifier*** using wrong examples