Abstract

Given a choice of classifiers each performing differently on different datasets the best option to assume is an ensemble of classifiers. An ensemble uses a single learning algorithm, whereas in
this paper we propose a two stage stacking method with decision tree c4.5 as meta classifier. The base classifiers are Naïve Bayes, KNN and C4.5 tree. The decision tree learns from the classification output given by base classifiers after feature selection in the first stage on training data. The second stage classifies the test data using meta classifier. We prove that our algorithm provides better classification accuracy with UCI datasets.

References

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Index Terms

Computer Science
Artificial Intelligence

Keywords
A Two-Stage Tree based Meta-Classifier using Stack-Generalization

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