Superiority of Rotation Forest Machine Learning Algorithm in Prediction of Students’ Performance

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 137
Number 2

Year of Publication: 2016

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Abstract

Now-a-days the volume of educational data stored in educational database is increasing rapidly and these databases comprise hidden information for improvement of students’ performance. Therefore we need computational methods to study the data available in the educational field and bring out the hidden knowledge from it. In this study, the experiments were conducted for the prediction task of educational data obtained from UCI Machine Learning repository using the five machine learning algorithms. The feature selected is used for training and testing of each classifier individually with ten-fold cross validation. The results obtained show that the ROF classifier outperforms other classifiers in terms of Area under the ROC curve (AUC), accuracy and MCC respectively.

References


**Index Terms**

Computer Science  
Algorithms

**Keywords**

Accuracy, Machine learning, Rotation forest, students’ performance, UCI Machine Learning repository