Abstract

Nowadays all the decisions making and large data analysis is made using computer applications. In such kind of application we use the data mining techniques to analyses them. Different domains of research like management, engineering, medical, education are frequently using these techniques. Data mining in educational system is an emerging discipline that focuses on applying data mining tools and techniques on educational data. Educational data mining is used to study the data available in the educational field and bring out the hidden knowledge from it. In this research work, data mining techniques is used to make smart decisions for the student, additionally this technique is used to analysis the performance of the students in educational domain, to make analysis and making decisions here we are using C5.0 decision tree. Comparative study is done on ID3, C4.5 and C5.0. Among these classifiers C5.0 gives more accurate and efficient output with comparatively high speed. Memory usage to store the rule set in case of the C5.0 classifier is less as it generates smaller decision tree. This research work supports high accuracy, good speed and low memory usage as proposed system is using C5.0 as the base classifier. The classification process here has low memory usage compare to other techniques because it generates fewer rules. Accuracy is high as error rate is low on unseen cases. And it is fast due to yielding pruned trees.
Handling Missing Value in Decision Tree Algorithm

References

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Handling Missing Value in Decision Tree Algorithm

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Index Terms

Computer Science       Information Sciences

Keywords

Data Mining    Decision Tree    Educational Data Mining    C4.5 and C5.0 Algorithm