

Student Graduation Prediction Model Using Decision Tree C4.5 and Weka

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Abstract

In this research, we build a model to predict graduation status of students in Kesatuan Institute of Business and Informatics using C4.5 decision tree algorithm. The prediction model is built using students' GPA from semester 1 to semester 4, for students with admission year of 2013 to 2016. The prediction model obtained is a decision tree with 26 rules, with the attribute IPS_4 being the attribute that determines the graduation label of students. This prediction model yields an accuracy of 73%, a result that is not good enough. This result is probably due to unbalanced proportion of the data used. Further research should be conducted on this issue in order to obtain better result.

Keywords: data mining, graduation prediction, C4.5 algorithm, Weka
