

PREDICTION SYSTEM OF STUDENT ACADEMIC ACHIEVEMENT USING DECISION TREE C4.5

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ABSTRACT

Informatics study program has a lot of new students who earn a high GPA semester early, but at the end of the semester some of which can not maintain his GPA high. Achievement prediction system is designed to provide estimates of categories of achievement information obtained when the final semester as an early warning for students.

This research applies data mining classification technique using decision tree C4.5 to predict student's academic achievement. The attribut used is the origin of the school authorities, the status of origin school, department when the high school, the average value of the national exam, work student status, motivating the parties in choosing college.

The data used are taken from the student questionnaire data UMG Informatic's Engineering class of 2010 as many as 98 data. System testing by performing experiments using a composition of twelve different data to determine the accuracy of each experiment. The rules used are the result of the formation of a decision tree on the eighth trial, because the rate accuracy from the eighth trial is the highest with value 90%.

Keywords: *Data Mining, Classification, Decision Tree C4.5.*

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