Abstract

Because of rapid increasing of data in educational environment, educational data mining emerged to develop methods for exploring the unique types of data that come from educational settings, and using those methods to better understand students, and the settings in which they learn. In this paper using a concept of educational data mining students' performance is predicted based on their academic record, using a decision tree algorithm. The data was collected from the college of Agriculture, Department of Horticulture – Dilla University. The data include five years period [2009-2014]; the preprocessing, processing and experimenting was conducted using RapidMiner tool. During processing among a total of 49 various attributes which will help to improve the student’s academic performance 27 important rules were generated. From the generated model specific courses, sex, academic status in 1st and 2nd year of the students determines the performance of student. Finally, the decision tree algorithm was tested and it provides a promising result of accuracy of 84.95%.


Students' Performance Prediction based on their Academic Record

Index Terms

Computer Science

Information Sciences

Keywords

Performance, prediction, academic record, educational data mining, decision tree