Abstract

Students dropout and delay in graduation are significant problems at Katsina State Institute of Technology and Management (KSITM). There are various reasons for that, students’ performances during first year is one of the major contributing factors. This study aims at predicting poor students’ performances that might lead to dropout or delay in graduation so as to allow the institution to develop strategic programs that will help improve student performance and enable the student to graduate in time without any problem. This study presents a neural network model capable of predicting student’s GPA using students’ personal information, academic information, and place of residence. A sample of 61 Computer Networking students’ dataset was used to train and test the model in WEKA software tool. The accuracy of the model was measured using well-known evaluation criteria. The model correctly predicts 73.68% of students’ performance and, specifically, 66.67% of students that are likely to dropout or experience delay before graduating.


Index Terms

Computer Science | Artificial Intelligence

Keywords

Educational Data Mining, Student Performance Prediction, Classification, Neural Network.