Abstract

Lembaga Biasiswa Negeri Kedah (LBNK) is a state government body that helps to provide a scholarship or educational loan to the individual who are born in Kedah**.** To approve an educational loan application is not an easy task and it will take a longer time if the manpower in not sufficient. To assist LBNK in reducing cost and processing time, this study aims to develop a forecasting model that can be used by the management to accelerate the loan application processing. In this study, the neural network based forecasting is selected. Such a technique has been chosen since this technique is able to recognize non linear patterns with the data set. For this purpose, a multilayer perceptron with backpropagation learning was employed to predict whether an application is suitable to be awarded a scholarship or loan by LBNK. A total of 1062 applications for the year 2002 was used to test the identified neural network model. The training and test results indicate that the highest result achieved is 99.06%. This indicates that neural network has the potential to be used as a forecasting model in education.