

ABSTRACT

Nowadays, distribution of scholarships only uses estimates that decides whether the applicant is suitable or not suitable on getting a scholarship and has not used the certain algorithm so that the acceptance of scholarships can be said to be not on target. From this case, it is necessary to have the right calculation so that it can be right on target.

The method used by the author is the method of Decision Support System (DSS) using the C4.5 algorithm. Calculation of the method uses predetermined scholarship terms. The system will use data training or previous scholarship data as algorithmic learning. The system in the form of a web will display the results of the scholarship recipient along with the plot used. This system is implemented using R Shiny found in Rstudio.

The web display training data, test data, the results of the C4.5 algorithm calculation, the number of scholarship recipients, and plots in the form of decision trees. Classification evaluation of C4.5 algorithm in the case of scholarships shows an accuracy of 97.6303%. The results in this study are those that influence the decision to receive scholarships, there are GPA and salary, while the file attributes or supporting letters, achievement, job and the number of children, wife/husband are not affect the decision to receive scholarships.

Key Word: Decision Support System (DSS), C4.5 Algorithm, R Programming, Scholarship