Final Year Project

WEIGHTED NAÏVE BAYES CLASSIFICATION ALGORITHM FOR SCHOLARSHIP SELECTION PROCESS IN SMA KESATRIAN 2 SEMARANG

Proposed as one of the requirements to complete the Bachelor (S1) at the Faculty of Computer Science Graduate Program University of Dian Nuswantoro



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Created By:

Name

: Arif Nurul Ikhsan

SID

: A11.2014.08263

Study Program

: Bachelor of Informatics Engineering

FACULTY OF COMPUTER SCIENCE
DIAN NUSWANTORO UNIVERSITY
SEMARANG

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ABSTRACT

SMA Kesatrian 2 Semarang has a scholarship program for outstanding students with financial limitations. Assessment criteria are also numerous, including value, parental income, gender, achievement, parent amount or sibling, extracurricular or organizational count. The problem that often arises is the lack of accurate scholarship distribution to the students, for example, students who are not really worthy of scholarship but get a scholarship, otherwise the students are entitled to scholarship both scholarship achievement and underprivileged scholarship but not get scholarship This study aims to apply the Weight of Naïve Bayes to overcome the problem of objectivity in making scholarship award with the end result of the classification model that has good performance. Based on the results of research experiments successfully created a tool for classification of scholarship with criteria that support decision-making. So that the provision of decisions can be right on target to the students who really deserve the scholarship is notable and scholarship achievement. The study succeeded in implementing Weighted Naïve Bayes in addressing the objectivity issues of scholarship decision making. In testing Weighted Naïve Bayes has good performance proved with the value of 93% accuracy testing of scholarship achievement and 96% accuracy testing of poor student scholarship.

Keywords: Classification, Scholarship, Data Mining, Naïve Bayes, Fiture Weighting.