

**APPLICATION OF DATA MINING USING NAIVE BAYES ALGORITHM  
TO HELP STUDENTS OF SMA NEGERI 5 SEMARANG IN  
DETERMINING THE MAJOR IN STATE UNIVERSITY IN SEMARANG**

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**ABSTRAK**

After the students graduated from high school, they should continue their education to college. Universities having a system that is different from high school, because the college has many choices faculties and departments with different learning materials. Differences study systems in college make students difficulty in choosing majors or courses of study at colleges according their interests or desires, intellectual ability, the field of study that controlled, and the accomplishments they achieved or by they marks obtained by the students as well as the expectations of upcoming career after graduating from university. In this case, that the problem was interesting to study, that in the taking decision to determine the major or universities that will be wants the students after completing their education in high school when they want continue their education to college. To assist students in determining the major of study will be selected using the marks which is obtained can be applied using classification techniques in Data Mining (DM). by applying classification techniques, is expected to help students of SMA Negeri 5 Semarang in solving the problem of determining majors at university. In this research using Naïve Bayes Classification to provide suggestions in determining the majors for students. The result of the experiments that obtained in this study is 76.47% accuracy results. Development of prototyping system that has been done in this study aims to assist students in determining the majors which will be selected in university.

Kata Kunci : Data Mining, Classification, Naïve Bayes Algorithm, Determining Major, Major University

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**ABSTRACT**

After the students graduated from high school, they should continue their education to college. Universities having a system that is different from high school, because the college has many choices faculties and departments with different learning materials. Differences study systems in college make students difficulty in choosing majors or courses of study at colleges according their interests or desires, intellectual ability, the field of study that controlled, and the accomplishments they achieved or by they marks obtained by the students as well as the expectations of upcoming career after graduating from university. In this case, that the problem was interesting to study, that in the taking decision to determine the major or universities that will be wants the students after completing their education in high school when they want continue their education to college. To assist students in determining the major of study will be selected using the marks which is obtained can be applied using classification techniques in Data Mining (DM). by applying classification techniques, is expected to help students of SMA Negeri 5 Semarang in solving the problem of determining majors at university. In this research using Naïve Bayes Classification to provide suggestions in determining the majors for students. The result of the experiments that obtained in this study is 76.47% accuracy results. Development of prototyping system that has been done in this study aims to assist students in determining the majors which will be selected in university.

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