ABSTRACT

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Prediction Analysis of Non-Active Student Status Using the K-Nearest Algorithm Based on *Forward Selection*

Problems encountered in managing student lecture activity data (AKM) such as determining the total Semester Credit Units (SKS) and GPA for non-active students. In managing academic data into information as an aspect of decision making. Several factors such as Semester Achievement Index (IPS), Number of Semester Credits, GPA, Total Number of Credits, Costs, Parents' Income and Student Status. Steps to prevent indications of non-active students need to analyze predictive patterns to determine the remaining student study period and produce accurate information and as predictive material to compare data every year from the 2017-2019 academic year against K-NN non-active students based on Forward Selection. The non-active student prediction research uses Rapid Miner testing on 342 student datasets, resulting in an accuracy value *of K-Nearest Neighbor* (k-3) of 93.55% and Forward Selection (k-3) of 99.39%. From the results of the analysis, it was found that there were 1160 students who would drop out as a proposal for management in the next reporting period. then the research can be developed further to determine the more optimal k value by adding the aspect of the classification of the status of students working or not working.

Keywords: Non-Active Student Status, K-Nearest Neighbor Algorithm, Forward Selection, and Rapid Miner.

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