ABSTRACT

PREDICTION ANALYSIS OF SPECIALIZATION FIELD SELECTION USING CLASSIFICATION METHOD WITH C4.5 ALGORITHM (CASE STUDY : TELKOM UNIVERSITY INFORMATION SYSTEM STUDENT)

By

ANAWAHIDAH RIZKY MANURUNG

1202154337

In the selection of specialization fields during lectures, students often choose not according to the interests and talents of these students. So that it can affect sustainability during the lecture period. The use of specialization field selection classifications with the Decision Tree method will be applied to predict the selection of specialization fields that will be taken by students so that students are not wrong in choosing the field of specialization and facilitate academic planners in making decisions in the field of specialization. The data classification process will use the C.45 algorithm using the help of the RapidMiner application to find out the best accuracy performance. For selection criteria the specialization field is based on academic data originating from I-Gracias (Telkom Academic Portal). The results of the classification analysis obtained in the form of a prediction model with an accuracy of 92.33% and the most influencing factor in the prediction of the selection of specialization fields is PP1 (Specialization Option 1). The results of the analysis of the specialization field selection are expected to be used to determine the prediction of the specialization field that will be taken by students to determine the interest that will be taken in accordance with their own background, interests and abilities.

Keywords - Classification, Prediction, Selection of Specialization Fields, Decision Tree, C.45 Algorithm, RapidMiner.