

AUTOMATIC MESSAGE ANSWERING APPLICATION STUDY PROGRAM INFORMATION SERVICE USING A RULE BASED APPROACH

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ABSTRACT

The university seeks to deliver easy, fast and accurate information regarding new student enrollment, academics, scholarships, tuition fees and other information. To that end, they develop innovative and up-to-date web-based information service systems. In addition to web technology, artificial intelligence (AI) based information technology is also developing rapidly and bringing many changes in human life. The purpose of this research is to build a system that makes it easier or saves time in searching for Yogyakarta University of Technology information by implementing an information system chatbot whose information is contained in the three official websites of Yogyakarta University of Technology as summarized. The chatbot system is made using the machine learning method with TF-IDF as a word representation to understand and process input text more effectively. By converting text into a numerical representation that reflects the importance of words in the context of the document and using a Machine Learning approach, which shows that with machine learning technology, a chatbot can learn and improve its ability to understand and respond to questions or requests from users based on existing data. The final result obtained is the formation of a chatbot system that is able to handle students getting information about the Informatics study program Yogyakarta University of Technology directly without having to do a manual search for the information sought and produce answers that are as expected.

Keywords: Chatbot, TF-IDF, Text Pre-processing