

ABSTRACT

Drop out is a term that often used for the case of termination of education, which is the understanding of the process of revocation of student status upon students caused by certain things that have been determined. IT Telkom itself in the environment, Drop out is defined as a resignation. It can provide a loss both for the experience or college where a person is in the drop outs. The main disadvantage for people affected by the drop outs are not able to continue their education, while for colleges is the lack of credibility in the eyes of society.

When talking about feelings and intuition, there is a system that can adopt either case, the system is a fuzzy system. So by using the fuzzy system can assist in making predictions pontensi drop out. But the experiences to the fuzzy system are how to define membership functions that can produce the best solution.

In this Final Project, built a Fuzzy System using Genetic Algorithm, so that will be generated a membership function that provides the best solution. In this final task determined the best parameters of the Genetic Algorithm used in Fuzzy Systems.

From the analysis, the best parameter Genetic Algorithm is a population with 100 individuals, $P_c = 0.6\%$, and $P_m = 1 / 44$. And from the results of testing the accuracy of the Fuzzy System is 97.5%. This accuracy means that there are 97.5% of students who used the data as training data, where the actual events (dropped out or graduated) in accordance with the outputs issued by the fuzzy system.

Keywords: Drop Out, Fuzzy Systems, Genetic Algorithms