

ABSTRACT

Currently, scheduling system used in the final project computational science study program in Telkom University still have some weakness. Among others, the selection of examiner and adjustment courtroom is still done manually. This thesis provides an alternative to the coordinator of the thesis that the schedule is generated quickly and efficiently by knowing accuracy of the scheduling of the trial final. In this research implements Artificial Neural Network methods (ANN) and Genetic Algorithm methods (GA) in determining the examiner, court room, and hearing schedule in accordance with the final exam. Artificial Neural Network is used to determine the candidates in accordance with the final project specifications and group membership and the Genetic Algorithm is used to determining the hearing schedule. The optimal schedule in this research were generated using hidden layer 20 at ANN and as many as 5 generations and 192 the number of individuals in the GA with the value error ANN (RMSE) of 1.433% and the value of fitness GA at 0.92708.

Keywords : Scheduling , Neural Network , Genetic Algorithm.