

## ABSTRACT

Fuzzy Logic is a method that can be used to solve problems which contain uncertainty / fuzzy value. For example this method can be used to determine the volume of water that flows out from a crane automatically based on environmental condition on present. Fuzzy logic changes crisps inputs into a fuzzy value then its combining those values with certain rules to produce a crisp output to be processed.

In this final project, fuzzy logic used as a preprocessing from some of the inputs that taken from the patient input data. These input data will be changed to a new data to be processed in the main process. As the purpose of the preprocessing method, this will make the computation easier and more accurate as relevance to the present condition.

Genetic algorithm used for the main process. Genetic algorithm has been quite known for solving optimization problem such as finding minimum or maximum from a mathematical function. Genetic algorithm adopted the human genetic process from the birth of the cromosome, the crossover to the mutation to produce a new individual

In this final project, the genetic algorithm act as the main processor that accept inputs from the patient data dan the fuzzy logic's output to be processed into a last result, a queue of the patient.

**Keywords:** fuzzy logic, genetic algorithm, patient, clinic, queue