

## **ABSTRACT**

*Today technology is growing rapidly so that a job can be done through a sophisticated equipment with a microcontroller application. Utilization of this technology can be applied in the field of fisheries especially for freshwater fish breeders certainly many aspects of care that must be done. One of them is continuously feeding fish. It is necessary to maintain regular food intake every day. In addition, this application can ease the job so that fish farmers do not have to worry when left to go.*

*Therefore, in this final project created a system of automatic feeding fish in ponds with ATMEGA8535 microcontroller that is connected to an RTC (Real Time Clock) as adjustment of feeding fish in real time. This tool has two main parts, namely container and second container. The main container for storage of food reserves that are equipped with servo motor drive system as open and close valves. This container is connected with the limit switches are used to stop the rotation of the servo motor and buzzer that serves as a marker that food fish in the main container has been exhausted. Second container suspended on a rail which is driven by a DC motor to distribute the food in every pond fish. The container is also equipped with a servo motor drive systems open and close valves.*

*The system is equipped with a system controller which serves to set an eating schedule via pushbutton and displayed by the LCD which can be determined solely by the fish farmers. Based on the results of testing has been done, this automation tool can work for three ponds with a certain length and has been equipped with two doses of options based on the size of fish.*

**Keywords:** *ATMega8535 Microcontroller, RTC, Servo Motor, DC Motor, LCD.*