

ABSTRACT

Fish hatchery is a fish farming has a special room and consists of several ponds for fish farms from seeding, hatching, larvae rearing and growth to the adult stage. The process of cultivating fish, period of larvae rearing is important because this period is very influential in the growth of fish. The parameters around the neighborhood fish on larva rearing crucial so that monitoring is required for the environmental conditions surrounding the fish and fish needs. Smart fish hatchery is a system that can be used to monitor and maintain the parameters automatically for maker decision to work actuator.

In this final project, described how data obtained from sensors using fuzzy logic to running the actuators in smart fish hatchery. Fuzzy logic receives input from pH and water temperature that issued instruction to the actuator up pump and down pump and also receive data input water temperature and room temperature that issued instructions for actuator heater, chiller, lamp and ex fan.

From the test conducted for 25 days, obtained that fuzzy logic as a decision maker to work actuator can keep parameter conditions water temperature, room temperature, and pH of the water was always in normal ranges that have been defined.

Keyword: Actuator, Fish Hatchery, Fuzzy Logic, Sensor, Smart Fish Hatchery