

## **Abstract**

**Osteoglossum Bicirrhosum** or often called silver arowana fish is one of the most popular fish in Indonesia. However, silver arowana fish can be categorized as fish that are difficult to maintain because of the very high level of sensitivity to water quality. Water quality suitable for this fish is at a temperature of 26 ° C - 28 ° C and a water pH value of 7-8. This final project designs a system where this system can monitor and monitor water quality in silver Arowana aquariums. There are sensors and actuators mounted on aquarium that are useful to support this system. Data obtained from the sensor detection results are processed using the fuzzy logic method. The fuzzy logic serves to determine the decision of the actuator that is turned on to control water quality. Monitoring using ThingSpeak. Monitoring can also be done remotely so that users can enjoy their silver arowana fish comfortably because of a technology called Internet of Things (IoT). After testing, the system can monitor and control well, the system can display data on water temperature, pH values and actuator status on Thingspeak and the system is able to control water quality that affects the state of silver arowana fish that have been tested for 10 days and get the difference that silver arowana fish better after using the system than before using the system.

**Keywords:** internet of things, fuzzy logic, osteoglossum bicirrhosum, arwana silver