

## **Abstract**

**In the hobby of keeping fish today is quite a lot of interest, especially in aquarium ornamental fish. But there are constraints for maintainer, such as feeding fish. Pretty much fish-keepers still use the manual way. It has a lot of shortcomings, such as irregular feeding, uncontrolled portion of fish feeding that can lead to cloudy fast water quality, fish health condition rapidly decreased, easy to stress and can cause death in fish. With the development of information technology today, it can help problems on fish-keepers by studying fish behavior. It has been implemented an automatic feeding of fish based on the fish behavior using camera sensor and microcontrollers with the fuzzy logic method. That can set how much fish feed that needs to be removed, making an area restriction on the aquarium area. So that the fish behaviour can be known and adjusted to fish feeding needs, it can minimize wasted feed, increase fish growth and keep water quality to keep it clean.**

**Keywords: *microcontroller, fish detection, fuzzy logic, feeding area, fish behavior***