# ABSTRACT

*The hobby of keeping chirping birds is not a new thing for Indonesian people. Many of them have a hobby of keeping chirping birds because they are relatively easy to maintain and do not require a large area of land. Basically, maintaining thischirping bird is very easy because it is enough to pay attention to the feed, cage, and bath regularly. However, for people who have a very busy schedule and do not have time to bath the chirping birds, it will affect the health and quality of the chirping birds themselves.*

*In this final project, the design of an automatic bath system in the chirping bird cage will be carried out based on the level of temperature and humidity based on the Internet of Things (IoT). This system uses a DHT11 sensor to measure the humadity and temperature of the environment around the bird cage and uses an ultrasonic sendor to determine the amount of water in the reservoir. In this study, a water pump was also used as an automatic bathing device assisted by a solar cell powerbank as a power source for the microcontroller and a 12 V power supply as a voltage amplifier for the water pump.*

*This study uses NodeMCU ESP8266 as a microcontroller and applies the fuzzy logic method by calculating the duration of automatic bathing for the bird.*

***Keywords :*** *Internet of Things, chirping bird, fuzzy logic, temperature sensor.*