## **ABSTRACT**

Incubator hatching chicken eggs automatically become the needs of the farm. Many farmers who have installed incubator egg hatchery that is on the market, because by using a chicken egg incubator this chicken can help farmers in terms of temperature and humidity settings. The incubator on the market is still semi-automatic, sometimes the egg roller still uses human help. That way the machine that is on the market is still less efficient for a relatively large entrepreneurs.

In this final project is made incubator hatching chicken eggs are automatically applied. This incubator can set the temperature and humidity automatically and time. Automatic temperature and humidity settings and monitor with smartphone can make it easier for breeders to supervise hatching of chicken eggs. With the incubator hatching chicken egg is made more efficient because the farmers have a system that runs with automatic system.

The built system has a sensor that serves to retrieve the temperature and humidity data in the incubator. Available data is sent to the server to be processed by fuzzy logic which is the ultimate decision to determine the way the lamp, fan and turn of the egg. The lamp lights up if the temperature in this room is cold, the fan turns on if the moisture is wet and the egg rotates automatically within 4 hours ya.

In the test takes approximately 21 days to incubate chicken eggs. And done for five times with a successful 40%. Or in other words eggs that hatch 2 of 5 eggs hatched with incubator hatching chicken egg automatic.

Keywords: automatic chicken egg hatching, incubator, fuzzy logic