

Abstract

Determining the quality of eggs in general is used by placing eggs on a flashlight. The detection system is important to determine the quality of egg, whether it is good or rotten, so it will provide quality insurance to farm company and customer. This egg detecting system combines two sensors, light sensor and a heavy sensor connected with a microcontroller. The use of these sensors is to minimize ambiguity and increase performance. The data read, then is processed using Fuzzy Logic and Firebase methods in real time. Connected to actuators, this system is able to separate good eggs and rotten eggs. With this technology, now it is possible to expand farm industry. With the development of technology now, we can use the Internet of Things (IoT) technology, one of the system check the quality of eggs which are good or not good. This system is built using a microcontroller to coordinate the running of the system using the Fuzzy Logic Method that applies inside. Final information is obtained on the form of egg quality in real time. The test results were carried out using the Fuzzy Logic method and obtained 95% results from 20 eggs and had 1 wrong egg. When using system hardware without using the fuzzy logic method on the microcontroller that using only a light sensor and a heavy sensor it produces a result of 75% from 20 eggs and had 5 wrong eggs. Using the egg detection optimization method can be increased up to 20%.