Implementasi *Fuzzy* Sugeno Pada Pembuatan Kandang Pintar Burung

Puyuh Berbasis *IoT*. *(Implementation of Fuzzy Sugeno in the Making of IoT-*
Based Quail Smart Cages)

Pembimbing (1 orang).

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ABSTRACT

The smart cage for quail is a cage designed to automatically maintain a stable temperature, humidity and ammonia gas. Laying quails of production age can achieve optimal egg-laying performance if kept in cages that have a temperature of around 24-29 degrees Celsius, with a humidity level of 60%-70%. Temperature and humidity that are less than or more than the ideal limit can cause quails to experience excessive stress which results in immunosuppression or decreased immunity of quails, which results in unstable egg production. To overcome this problem, a microcontroller based on the Internet of Things was created which is able to keep the temperature and humidity conditions stable. With this microcontroller, it can also be used as a monitoring tool for temperature, humidity, and ammonia gas conditions in quail cages. From the test results, the accuracy of the sensor used by this tool is able to stabilize temperature, humidity, and ammonia gas automatically.