

**ABSTRACT**

*Title : Designing an Automatic Clothes Drying Intelligent System with Mobile-Based Sugeno Fuzzy Method*

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*Human freedom who has high mobility outside the home must not be able to remotely monitor the clothes they are drying in accordance with what is safe when it rains and will come out again to compile the sun's heat, because it can make clothes become hot, moist and smelly because they are not yet dry maximum. The purpose of making this tool is approval, the Internet of Things (IoT) using the Universal Board with an ATmega328 microcontroller to measure, record and display data via a smartphone. Sugeno fuzzy method is used to find the ambiguous value of the system. The design of the system consists of a Universal Board module with an ATmega328 microcontroller which functions as an automatic clothes drying tracer brain controller, a series of light dependent sensors, rain drop and DHT22 sensors, as well as DC motors and micro switches that produce output from all of these sensors. The data obtained is received on the mobile application. This tool and application have worked well, this can be seen from a number of tests that have been carried out there are no significant differences in the calculation system and manual calculation.*

**Keywords:** *Internet of Things, Light Dependent Resistor Sensor, Rain Drop Sensor, DHT22 Sensor, Fuzzy Sugeno Method, Mobile.*