

ABSTRACT

Utilization of ordinary sunlight is used to help community activities, one of which is drying clothes. Obstacles when drying clothes are unpredictable rain and generally people have the habit of leaving clothes being dried in the sun. Based on the problems above, this thesis applies the concept of the Internet of Things (IoT) in making automatic clothesline and building a weather monitoring and prediction application on automatic clothesline, which is used to control and predict the weather.

The method used to predict the weather is fuzzy logic. For the manufacture of automatic clothesline prediction and monitoring applications using three variables adjusted to the sensors in the automatic clothesline, namely temperature, humidity, and light intensity. The three variables also have three linguistic values for each variable.

Tools / tools used to make automatic clothesline prediction and monitoring applications consist of three sensors, namely temperature sensors, water sensors, and solar panels that are on automatic clotheslines. The software used to create applications is thinkspeak used to store sensor data, MySQL is used to store data, visual studio is used for application development, and uses the python programming language.

Fuzzy logic in this thesis uses the Mamdani method. The level of accuracy in weather prediction is 60,94%. Because the variables used in this thesis are only three. The more variables that are inputted, the better the output (accurate) will be.

Keywords : IoT, Forecasting, Monitoring, Website