

## ABSTRACT

The development of increasingly sophisticated technologies requires us to think something that is much easier and lighten our work. Especially with the level of human activity continues to rise, household problems become more complicated and difficult to be solved. We could see the problem in drying the clothes. This problem become harder when it faced up by people that living in small and urban places like the flat and apartment. We usually get this problem double in the rain season, when the clothes that is being drought suddenly get wet again because of the rain while the occupants were outside the house.

At the final project was designed and realized with a simulation tool automatic clothes dryer prototype, which is able to respond to the rain or dark condition by moving the clothesline automatically. This tool works based on the water or rain sensor and light sensor. *When* the rain falls or overcast, the rain sensor and LDR will be activated and push the motor to get reversed and saving the clothes to the dry area. If the rainfall already finished, the rain sensor will give signal to the circuit that tells the motor to be forwarded, so that we could continuing the activity of drying the clothes.

Tests performed on two conditions, firstly it does not rain and sunny conditions, and second rain and or dark condition. from both these conditions the device can work well. If it does not rain and sunny condition the device will move forward clothesline, and then if it rain and or dark condition the device will move retreat clothesline.

Keyword: clothes dryer, rain sensor, light sensor.