

## ABSTRACT

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*Aeroponic is an environment farming system at limited land which does not use soil, however it sprays water filled with nutrients in the form of fog on to the plant's root. One of the problems found on the aeroponic system is the difficulties in arranging fogger opening, water pressure to adjust with the temperature of aeroponic system. An alternative solution to solve this problem, is by using system that could arrange fogger opening on the aeroponic system. The proposed system has several components namely temperature sensor (NTC-B3590), relay and dual bridge DC motor driver. The sensor will read the temperature on the aeroponic system planting room and send data to the microcontroller. The microcontroller will process the data and control the relay while adjusting the water pump velocity in the motor drive based on the temperature and time projected. The experiment shows that the system could organize 80% of the water pressure and 80% of the fogger opening on the fogging system with temperature parameter in the aeroponic system of the planting room. Based on that, this system could be implemented on farming especially on limited lands.*

*Keywords: Aeroponic, Fogger, Temperature Sensor (NTC-B3590), and Motor Driver BTS7960.*