

MONITORING SYSTEM SERVER ROOM

**Thesis presented in partial fulfillment for the award of the
Bachelor of Electrical Engineering (Hons)
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ABSTRACT

It is important to ensure suitable atmospheric conditions in a server room. This project is aim to develop automatic system which will be able to alert overheating condition in a server room. It provides real time monitoring and alert system to the server operator via SMS and buzzer alarm system. The system comprises of Rabbit Core Microcontroller (RCM2000) as a main processor, GSM Module for mobile transmission, Analog to Digital Converter (ADC) to convert the analog signal to digital signal, Liquid Crystal Display for displaying the data and also cooling fan and buzzer.

Basically this project can be divided into software and hardware. The RCM 2000 is programmed using Dynamic C to control the functionality of the hardware. The temperature inside the server room will be monitored by the heat sensor that relays the temperature data to RCM 2000 through ADC. If the temperature detected above 31°C, the microcontroller will interpret is an “over heating” thus the information will be sent to the server operator to alert them via Short Messaging System (SMS). Once the temperature of the server room return back to stable condition of 20°C - 30°C then another message will be sent to inform the server operator. Through series of testing that had been carried out, the developed MSSR system proved to function as desired.

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