

DEVELOPMENT OF MICROCONTROLLER BASED INTRUDER ALARM SYSTEM USING GSM MODULE

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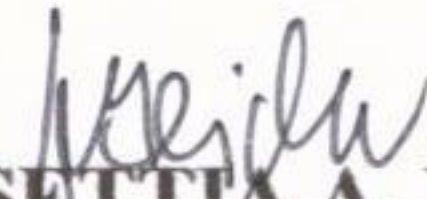
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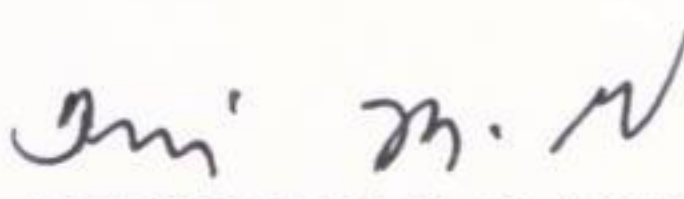
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ABSTRACT

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The main objective of the study was to design and develop a microcontroller based intruder alarm system using GSM module. Specifically, this study aimed to determine the efficiency, accuracy and the cost of the device. The study was conducted from December 2017 to January 2018.

The device developed was composed of the PIR, buzzer, battery, GSM shield and wires. The Gizduino microcontroller board was the brain of the whole system unit which was capable of reading, interpreting, instructing commands to the alarm and appropriate SMS response.

The intruder alarm system was developed to provide solutions to the growing need of additional security system that can help in protecting different infrastructures.

The device developed underwent several testing at Department of Computer and Electronics Engineering, Cavite State University.

The device was tested by determining the efficiency and the accuracy of the expected output performance. An average of 100 percent overall level of accuracy of the device was noted. The device can more efficiently detect depending on the size, the larger the size the higher is the average distance. The product cost was Php 3134.50.

The product was found satisfactory since the system was able to detect and perform the task successfully. The most significant recommendation was to add camera to the system.

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