Robotic Cleaning Machine for CCIT Classrooms

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CERTIFICATION

This thesis entitled **"Robotic Cleaning Machine for CCIT Classrooms"** prepared and submitted **by Nika N. Bernal, Willard E. Garcia, Jessa T. Estella, Loreal D. Mendoza** in partial fulfilment of the requirements for the degree **Bachelor of Science in Computer Engineering**, has been examined and recommended for Oral Examination.

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APPROVAL

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ABSTRACT

This thesis presented the Robotic Cleaning Machine for CCIT Classrooms. This study ensure to maintain cleanliness in a household, especially when its inhabitants are busy and cannot be troubled by such taxing chore, is necessary and cannot be overlooked. Cleanliness maintenance includes sweeping and mopping the floors daily and at least a weekly general cleaning of the whole household.

Robotic Cleaning Machine for CCIT Classrooms was developed using Arduino ATMEGA328 Microcontroller as the main board of the system. The robotic cleaning machine can be controlled manually and automatically and can be accessed thru Bluetooth connected to a mobile phone.

This device was designed for the classrooms which has a smooth surfaces and can collect dust particles and some tiny pieces of papers. The battery life span of this device is good for half an hour with continouosly using of a vacuum, but without using it, only the mop and sprinkler it can last 3 hours up to 4 hours.

The automatic function of this device have an anti- collision and anti- fall sensor for the safety of the device to avoid an obstacles. Also, the movement of this device is from inner to outer.