



COLLEGE OF COMMUNICATION AND INFORMATION TECHNOLOGY

CERTIFICATION

The thesis entitled "SMART LOCKING DOOR USING GSM", prepared and submitted by **ARRIANNE JOY H. LAROZA, JAMES CHARLES C. LUMABAS and MAIKELYSSA E. MANUEL** in partial fulfillment of the requirements for

**SMART LOCKING DOOR USING GSM**

**MELOJEAN C. MARAYEL MNT**

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**ENGR. RICKY S. BARTERA**

Chairman

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Bachelor of Science in Computer Engineering

**ENGR. DOMINIO M. MARTIN JR.**

Member

By:

**Arrianne Joy H. Laroza  
James Charles C. Lumabas  
Maikelyssa E. Manuel**

March 201

**RESOLVO A. DELA CRUZ, Ph.D.**

Dean



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**MELOJEAN C. MARAVE, MSIT**  
Adviser


**APPROVAL**


Approved by the Panel of Examiners on Oral Examination on March 22, 2017 with the grade of \_\_\_\_\_.

  
**ENGR. RICKY S. BARRERA**  
Chairman


  
**FRANCO D. NERO, MSIT**  
Member

  
**ENGR. DENNIS A. OLAMIT**  
Member

  
**ENGR. DIONISIO M. MARTIN JR.**  
Member

  
**ENGR. RICKY S. BARRERA**  
Program Chair, BSCpE

Accepted in Partial fulfilment of the requirements for the degree of **Bachelor of Science in Computer Engineering**.

  
**MENCHIE A. DELA CRUZ, Ph.D.**  
Dean



**ABSTRACT**

In this paper, we propose a smart locking door using gsm for home automation. The proposed method in this study uses the application of smartphone communication technology to conventional device (door lock) to open or close a door remotely through authentication. In particular, this study proposes the Smart Door Lock System using Gsm based security enhancement plan for the safety issue caused by the physical key used. A digital door lock system is an equipment that uses the digital information such as a secret code as the method for authentication instead of the legacy key system. In our proposed system, a GSM module is embedded in digital door lock and it acts as a central main controller of the overall door lock automation system. Technically, our proposed system is the network of sensor nodes and actuators with digital door lock as base station. A door lock system proposed here consists of GSM module reader for user authentication, solenoid lock module for locking and unlocking of the door, IP camera module for detecting the person outside the door, communication module, and the main control module using a smart phone. As the door lock is the first and last thing people come across in entering and leaving the home respectively, the home automation function in digital door lock system enables user to conveniently control, monitor and identify the person outside the door all at once before entering the house. The biggest advantage of





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our proposed system over existing ones is that it can be easily installed when and where necessary without requirement of any infrastructures and proper planning.

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