MOTION DETECTION SYSTEM

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A Project Design presented to the Faculty of the
College of Communication and Information Technology
In Partial Fulfillment of the Requirements for the degree
Bachelor of Science in Computer Engineering
Ramon Magsaysay Technological University
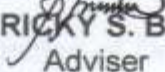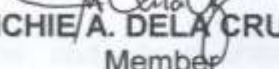Iba, Zambales

March 2015

CERTIFICATION

This project design entitled **"MOTION DETECTION SYSTEM"**, prepared and submitted by Lexandro E. Cancino, Ken Leonard C. Mose and Reynaldo O. Villanueva, Jr. in partial fulfillment of the requirements for the degree **Bachelor of Science in Computer Engineering**, has been examined and recommended for Oral Examination.
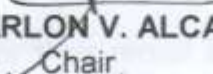
Thesis Committee

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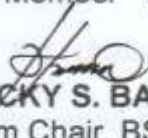**ENGR. MARY JOYCE M. MYERS**
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APPROVAL

Approved by the Panel of Examiners on Oral Examination on March 15, 2015 with the grade of _____.
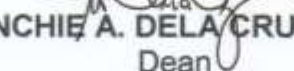
ENGR. MARLON V. ALCANCES
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Abstract

This research project is carried out to determine some of the basic motion detection algorithm that had been founded or developed or even researched previously. This thesis report would bring a presentation of these algorithms for researchers to get a basic idea of performing an algorithm for motion detection systems.

The main algorithm being discussed here are those implementing image subtraction methods and foreground-background segmentation approach. The thesis report also is aimed to give readers a main idea of the architecture of a motion detection system in applications.

This report is also written with the purpose of documenting the design and development of a prototype human motion detection system. Here, we presented some basic ways to perform a motion detection algorithm and also a new way to consider for background updating using spatial information instead of temporal. The experiments carried out to evaluate the performance of the prototype system is attempted and its results being recorded in this paper as well. As a conclusion, this paper is aimed to researchers interested to research on the basic idea of motion detection algorithm using image subtraction and foreground-background segmentation techniques.