

DESIGN AND DEVELOPMENT OF A ROBOTIC
FACULTY LOCATOR SYSTEM

Design Project

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**DESIGN AND DEVELOPMENT OF A ROBOTIC FACULTY
LOCATOR SYSTEM**

Undergraduate Design Project
Submitted to the Faculty of the
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ABSTRACT

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The Design and Development of a Robotic Faculty Locator System was conducted at Cavite State University, Indang, Cavite from December 2013 to October 2014. Generally, the study aimed to develop a robotic faculty locator system. Specifically, it aimed to design and construct the robot, develop the software to control the system, to integrate the system, test and evaluate the system; and conduct cost computation.

The designed robotic faculty locator focused on giving the location of a faculty member within the vicinity of the second floor of the Engineering Science building of Cavite State University at Indang, Cavite. The project used ATmega328 microcontroller that control the operation of the entire system. The robot was composed of one US-100 ultrasonic sensor and two three-channel line sensor. The robot was driven by motors which enable to turn and to move forward. The testing and evaluation of the robot was made based on the ability to perform a certain task. The total cost computation of the project amounted to P18, 092.00.

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INTRODUCTION

One common problem of a student searching for schedules of a faculty member is checking the posted schedules room by room. In some cases, if the posted schedules are not updated, the student tends to begin searching from first floor to fourth floor of the building. For freshmen students these might seem confusing. To lessen such event, a student needs better reliable source of information such as a faculty locator system.

Mostly, faculty locator system provides information about the schedules including class schedule and other extra activity of a faculty member. These give more understanding of schedules and location of the faculty member.

On the other hand, the technology nowadays is aiming at robotics. Robots are one of the helpful machines which give assistance to human and make work more productive. When properly programmed, it provides fast information.