

EAC

DE LA SALLE UNIVERSITY

DESIGNING AND DEVELOPING A HARDWARE
INTERFACE AND SOFTWARE ON A PERSONAL
COMPUTER (PC) FOR A PICK AND PLACE
EQUIPMENT APPLICATION

.....

A THESIS

PRESENTED TO

THE FACULTY OF GRADUATE SCHOOL

* COLLEGE OF ENGINEERING
DE LA SALLE UNIVERSITY

.....

IN PARTIAL FULFILLMENT

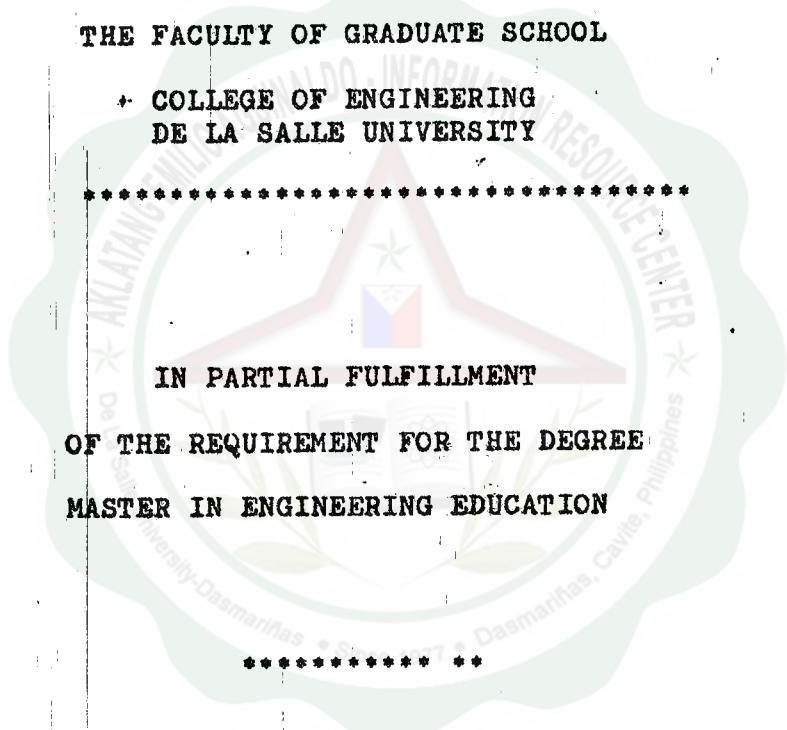
OF THE REQUIREMENT FOR THE DEGREE

MASTER IN ENGINEERING EDUCATION

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RONNIE M. YU

APRIL 1995



ABSTRACT

One of the most in demand technology for instruction is the robotic arm.

This project centers on the design of an interface circuit that connects the robotic arm and the Personal Computer (PC). The mechanical part is constructed and interfaced to a PC. Software programs are developed to control the movement of the robotic arm. This is done by a teach-and-learn method that pickup an object and place it to a desired location. There are two pre-defined or pre-programmed pick-up points and one placing point.