

**DESIGNING A PRODUCT IDENTIFICATION SYSTEM TO  
IMPROVE BOTTLE NECK IN A CHECK-OUT POINT USING  
RFID**

By

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A Bachelor's Thesis  
Submitted to the Faculty of

ENGINEERING

MECHATRONICS DEPARTMENT

in partial fulfillment of the  
requirements for the Degree of

BACHELOR OF SCIENCES  
WITH A MAJOR IN  
MECHATRONICS

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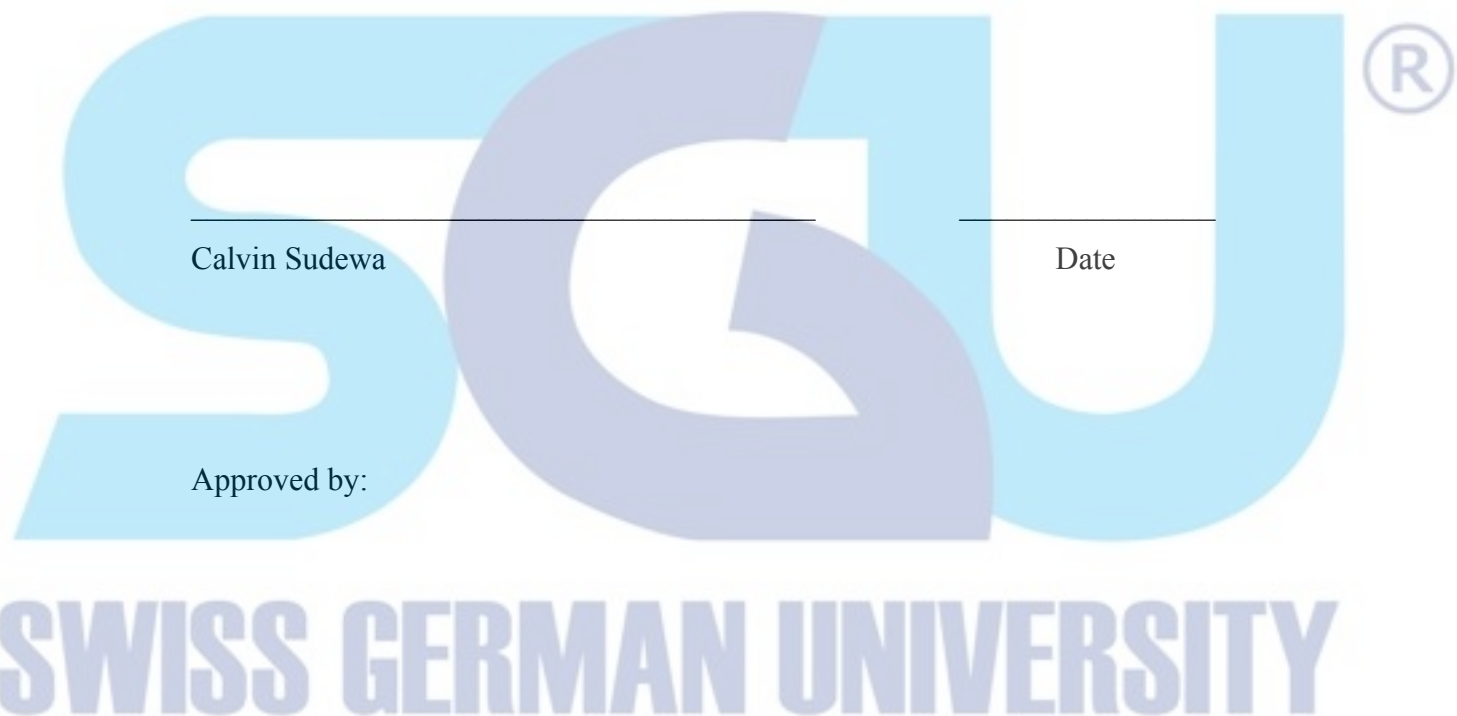
July 2008

Revision after the Thesis Defense on 13 August 2008



### STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, not material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.



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## ABSTRACT

### DESIGNING A PRODUCT IDENTIFICATION SYSTEM TO IMPROVE BOTTLE NECK IN A CHECK-OUT POINT USING RFID

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An automatic product identification system is a products identification process without stopping at check out process. The purpose of this thesis project is to reduce bottle neck during check out process. Using RFID (Radio Frequency Identification) technology, every item has its own tag. Product's ID is stored in the tag and not the same with the other tags. At the check-out point, RFID module will transmit product's ID via radio frequency. RFID reader module, which is located in check out point, will receive the ID, process it and make a confirmation to the tags. The received information will generate the cost and then charged to the registered account. The implementation of this system will reduce congestion at check out point and increase efficiency for payment process especially in retail business.

## **DEDICATION**

I dedicate this thesis to my family, my friends, and my thesis advisor Mr. Tutuko Prajogo, PhD.



## ACKNOWLEDGMENTS

First, I thank to God Almighty for giving me his bless during working on this thesis.

I also thank to my family for encouraging me during thesis work.

I would like to thank to people who involved in completing this thesis:

Mr. Tutuko Prajogo, PhD as my thesis advisor, for his guidance and advices during this thesis work;

Mr. Bambang Darwis for his contribution in programming;

Dipl.-Ing. Maralo Sinaga, Arko, PhD, Edward Boris Manurung, M.Eng., Erikson Sinaga, ST, Aditya Pratama S.Si, Ms. Veronica Handayani Sakri Sirat, Tanika Sofianti M.T, Cepi Hanafi SST, Dr. Ir. Prianggada Indra Tanaya MME, and Muhammad Farhan for their helps and supports;

My best friends, Christian, Edward, Felicia, Ines, Iwan, Margareth, Marissa, Pamela and Steven for keep supporting me and encourage me; and

All my friends that I can not mention one by one.

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