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Computer Controlled Exercise Bicycle

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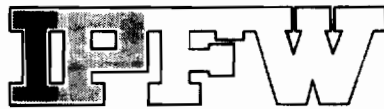
for

COMPUTER CONTROLLED EXERCISE BICYCLE
title

in partial fulfillment of the requirements

for the degree of

BACHELOR OF SCIENCE



presented to the

ELECTRICAL ENGINEERING TECHNOLOGY FACULTY

INDIANA UNIVERSITY-PURDUE UNIVERSITY AT FORT WAYNE

April 22, 1988
date

by

Christine Slaughter

GRADE: _____

APPROVED: _____

COMPUTER CONTROLLED EXERCISE BICYCLE

By Christine Slaughter

ABSTRACT

The primary objective of the Computer Controlled Exercise Bicycle or CCEB is to control pedal speed. The ability to use digital control, such as an A/D converter, and to control the speed of an exercise bicycle is required. Using an A/D converter will allow digital data to be sent to the Intel-SDK 86 to calculate pedal speed and elapsed time. This interface will allow for eight bits of digital data from the A/D converter to be read in through the I/O ports of the Intel-SDK 8086.

The CCEB interface implementation start the software development phase of the project. The objective is to write a BASIC program so that the user could enter a certain value from the host system, IBM personal computer to vary the pedal speed of the bicycle.

TABLE OF CONTENTS

	PAGE
I. Introduction	1
A. Statement Of The Problem	1
B. Proposed Solution	2
C. Major Task Description	2
III. Stepper Motor	4
A. Introduction	4
B. Stepping Sequence	4
C. Circuit Analysis	6
D. Motor Control Software	7
III. DC Clamper	9
A. Introduction	9
B. Postive Clamper	9
C. Circuit Application	9
IV. Voltage Regulator	10
A. Introduction	10
B. Circuit Analysis	10
V. A/D-Converter	13
A. Introduction	13
B. Function of the A/D-Converter	13
C. Circuit Analysis	14
D. A/D-Converter Software	14
VI. Aerobic Program	16
A. Introduction	16
B. Basic Software	16
VII. Conclusion	17
VIII. Cost For CCEB Development	18
IX. Schedule For CCEB Development	18
X. Bibliography	19
XI. Appendices	20
A. Proposal	21
B. Motor Data Sheets	22
C. Motor Software	23
D. ADC0804LCN Data Sheets	24
E. BASIC Software	25

LIST OF FIGURES

	PAGE
1. CCEB Block Diagram	3
2. Stepping Sequence	4
3. Motor Control Circuitry	5
4. Opposite Stepping Sequence	6
5. Motor Flowchart	8
6. DC Clamper	11
7. Voltage Regulator	12
8. ADC0804 Circuitry	15