

بسم الله الرحمن الرحيم

: قال تعالى

**وَقُلْ اَعْمَلُوا فَسَيَرَى اللَّهُ عَمَلَكُمْ وَرَسُولُهُ (**  
**وَالْمُؤْمِنُونَ وَسَتُرَدُّونَ إِلَى عَالِمِ الْغَيْبِ**  
**) وَالشَّهَادَةِ فَيُنَبِّئُكُمْ بِمَا كُنْتُمْ تَعْمَلُونَ**

صدق الله العظيم  
(سوره التوبه الايه 105)

## **Dedication**

To the great prophet Mohammed

“Peace and prayers be upon him”

To whom we love

For their encouragement and support

## **Acknowledgment**

To who is pointed me in right direction with this project through the guidance , my supervisor

**Dr. Abd Elfttah Bilal.**

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encouragement,  
time, criticism and advices.

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## **Abstract**

This thesis describes the design steps to pick and place automatic arm using the programmable logic controllers for .industrial applications

The system picks the object from the loading area and .placed it to anther specific area determined by limiting switches

This research illustrates the using of DC motors to achieve the movement and how to control it by using suitable control circuit.

Also it contains a program to manage the hardware of model written in STL to realize the required sequence.

هذه الأطروحة توضح خطوات تصميم نموذج نظام مناولة آلي بواسطة المتحكمات القابلة للبرمجة يستخدم في التطبيقات الصناعية, هذا النظام يقوم بأخذ الهدف من منطقته التحميل إلى نقطة محددة بواسطة مفاتيح نهايات . بالإضافة إلى ذلك هذا البحث يوضح خطوات استعمال محركات التيار المستمر لتحقيق الحركة وكيفية التحكم فيها باستخدام دائرة تحكم مناسبة.

أيضا يحتوي هذا البحث على برنامج مكتوب بلغة STL تعمل كوسيط بين المستخدم والمتحكم المنطقي لتحقيق الحركة المطلوبة .

## TABLE OF CONTENTS

|                   |      |
|-------------------|------|
| ACKNOWLEDGEMENT   | iii  |
| ABSTRACT          | iv   |
| المؤلف            | v    |
| TABLE OF CONTENTS | vi   |
| LIST OF FIGURES   | viii |

|                                                   |          |
|---------------------------------------------------|----------|
| <b>CHAPTER ONE: INTRODUCTION</b>                  | <b>1</b> |
| 1.1 Background                                    | 1        |
| 1.2 History of industrial robotics                | 4        |
| 1.3 Advantages and <b>disadvantages</b> of robots | 5        |
| 1.4 Problem Statement                             | 6        |
| 1.5 The Objective                                 | 6        |

## **CHAPTER TWO: THEORETICAL BACKGROUND 7**

|                                                         |    |
|---------------------------------------------------------|----|
| 2.1 Classification of Robots                            | 7  |
| 2.1.1 Use                                               | 7  |
| 2.1.2 Mobility                                          | 8  |
| 2.1.3 Motion Control                                    | 9  |
| 2.1.4 Capability                                        | 9  |
| 2.1.5 Arm Configuration                                 |    |
| 2.2 End Effectors                                       | 10 |
| 2.3 Degrees of Freedom (DOF)                            | 10 |
| 2.4 Robot Workspace                                     | 11 |
| 2.5 The General Structure of Robotic Mechanical Systems | 11 |
| 2.6 D.C motor                                           | 14 |
| 2.6.1 Control of motor                                  | 16 |
| 2.6.2 Manual Motor Controller                           | 16 |

|                                                     |           |
|-----------------------------------------------------|-----------|
| <b>CHAPTER THREE: Programmable Logic Controller</b> | <b>19</b> |
| 3.1 First programmable controllers                  | 20        |

|      |                               |    |
|------|-------------------------------|----|
| 3.2  | PL C controller components    | 22 |
| 3.3  | Central Processing Unit-CPU   | 23 |
| 3.4  | Memory                        | 24 |
| 3.5  | Programming a PLC controller. | 24 |
| 3.6. | Power supply                  | 25 |
|      |                               | 26 |
| 3.7  | PLC controller inputs         |    |
|      |                               | 27 |
| 3.8  | Input adjustment interface    | 28 |
|      |                               | 28 |
| 3.9  | PLC controller output         |    |
|      |                               | 29 |
| 3.10 | Output adjustment interface   |    |
| 3.11 | Extension lines               |    |

## **CHAPTER FOUR: DESIGN OF MODEL**

**30**

|     |                     |    |
|-----|---------------------|----|
| 4.1 | The Proposed Design | 30 |
| 4.2 | The Model           | 32 |
| 4.3 | Circuit Operation   | 34 |
| 4.4 | The Program         | 34 |
| 4.5 | The flow chart      | 35 |
| 4.6 | Main program        | 37 |
| 4.7 | The Result          | 45 |

## **CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS 46**

|     |                   |    |
|-----|-------------------|----|
| 5.1 | Conclusions       | 46 |
| 5.2 | Recommendations   | 47 |
|     | <b>References</b> | 48 |
|     | <b>Appendix</b>   |    |

## **LIST OF FIGURES**

| <b>Figure No.</b> | <b>Title</b>                 | <b>Page</b> |
|-------------------|------------------------------|-------------|
| 1.1               | Android type robot           | 2           |
| 1.2               | Manipulator or automatic arm | 3           |
| 2.1               | End Effector                 | 10          |

|     |                                                      |    |
|-----|------------------------------------------------------|----|
| 2.2 | Genealogy of robot mechanical systems                | 12 |
| 2.3 | Block diagram of a general robotic mechanical system | 13 |
| 2.4 | Manual motor-control circuits                        | 18 |
| 3.1 | PLC Component                                        | 23 |
| 3.2 | Input adjustment interface                           | 28 |
| 3.3 | Output adjustment interface                          | 29 |
| 4.1 | Base plate with stand                                | 30 |
| 4.2 | Motor with plate tow                                 | 31 |
| 4.3 | Circular plate with boss with plate three            | 31 |
| 4.4 | Flange with boss                                     | 31 |
| 4.5 | Assembly Drawing                                     | 32 |
| 4.6 | Model Circuit Diagram                                | 33 |
| 4.7 | Model Picture                                        | 33 |
| 4.8 | The flowchart                                        | 36 |
| 4.9 | The sequence                                         | 45 |