FINAL YEAR PROJECT REPORT

IOT BASED HOME AUTOMATION BY USING AI

In fulfillment of the requirement
For degree of
BS (COMPUTER SCIENCES)

By

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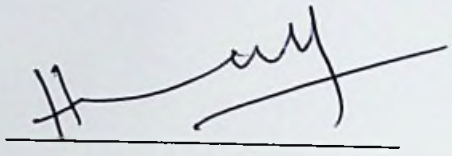
FALL-2020

DECLARATION

We hereby declare that this project report is based on our original work except for citations and quotations which have been duly acknowledged. We also declare that it has not been previously and concurrently submitted for any other degree or award at Bahria University or other institutions.

Signature : 

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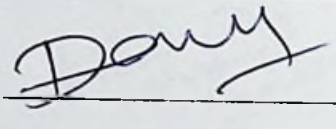
Signature : 

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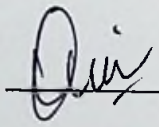
Signature : 

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APPROVAL FOR SUBMISSION

We certify that this project report entitled **"IOT BASED HOME AUTOMATION BY USING AI"** was prepared by **SYED HAIDER ZAMAN, DANISH MUSTAFA** and **MOHAMMAD OMER** has met the required standard for submission in partial fulfilment of the requirements for the award of Bachelor of Computer Science at Bahria University.

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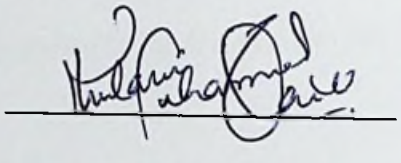
Signature : 

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IOT BASED HOME AUTOMATION BY USING AI

ABSTRACT

Automation deals with the management of electric/electronic devices with mobile/other application to provide easy to human for interacting these devices with ease . The principle of building an Automation is to achieve various advantages in a place and home and to improve lifestyle by using various technologies. Industrialists and scientists are attempting to work for productivity and reasonableness programmed frameworks to control various machines like lights, fans, AC dependent on the end user requirements. Automation makes an effective as well as a conservative utilization of power and lessens a large part of the wastage. Homes of the 21st century will turn out to be increasingly more self-controlled and robotized because of the solace it gives, particularly when utilized in a private home. A home Automation framework implies that permits clients to control electric apparatuses of differing sorts. Home Automation is the private expansion of building Automation and includes the control and robotization of lighting, heating, appliances, and security. Present-day frameworks for the most part comprise switches and sensors associated with a focal centre point some of the time called a "passage" from which the framework is controlled with a voice command. Home Automation frameworks are rapidly arising and getting well known these days on the planet, and its end clients are explicitly the disabled and older however because of their unpredictability and cost it isn't constantly acknowledged. By utilizing Raspberry Pi, we can assemble a home automation framework that is fit for operating these home gadgets consequently. The Raspberry Pi will fill in as an expert gadget through which the AI will impart and control the home machines. A home automation framework gives countless administrations which can comprehensively be characterized into the following four categories:

A. Comfortable management of appliances
B. Remote appliance control.
C. Efficiently utilizing house resources
D. Improving home security

Comfortable management incorporates bother free administration of lights, apparatuses, and so forth Remote controlling services incorporate getting to gadgets from a far off area, gadgets, and setting them ON/OFF. Proficient utilization remembers running the home apparatuses for their streamlined settings. The last classification of administration incorporates those administrations which are utilized for making the home climate safe.

TABLE OF CONTENTS

DECLARATION		**ii**
APPROVAL FOR SUBMISSION		**iii**
ACKNOWLEDGEMENTS		**vi**
ABSTRACT		**vii**
TABLE OF CONTENTS		**ix**
LIST OF FIGURES		**xi**
LIST OF SYMBOLS / ABBREVIATIONS		**xii**
LIST OF APPENDICES		**xiii**
CHAPTER		
1	**INTRODUCTION**	**1**
	1.1 Background	1
	1.2 Problem Statements	2
	1.3 Aims and Objectives	2
	1.4 Scope of Project	3
2	**LITERATURE REVIEW**	**4**
	2.1 Home Automation	4
	2.2 Elements	5
	2.3 Various Technology	5
	2.3.1 Discovery	5
2.4	Wireless Home Automation With IOT	6
3	**DESIGN AND METHODOLOGY**	**8**
	3.1 Work Flow For Door Lock Through Face Recognition	8

3.2	Work Flow For Door Lock Through Android App	9
3.3	Temperature Sensor Work	9
3.4	Work Flow For Operating Appliances Through Android App	10
3.5	Work Flow Of Mobile Application	10
4	**RESULT AND DISCUSSION**	12
REFERENCES		13
APPENDICES		15