



## **FINAL YEAR PROJECT REPORT**

# **AUTOMATIC SPEECH RECONGNITION TO CORRECT QURANIC PHONEME**

**In fulfillment of the requirement  
For degree of  
BS (Computer Sciences)**

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**AUTOMATIC SPEECH RECOGNITION TO CORRECT  
QURANIC PHONEME**

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## **AUTOMATIC SPEECH RECOGNITION TO CORRECT QURANIC PHONEME**

### **ABSTRACT**

The objective of this project is to develop speech recognition system to recognize Quranic phoneme while reciting and suggest corrections. This report explores different techniques used for the recognition of the recitation of the Holy Quran. Different stages like input, acoustic modelling etc will be studied and discussed. Finally the end product of the project will be an software recognizing recitation of the Holy Quran and suggesting corrections after being trained for a specific user. This project uses sphinx framework which is based upon the statistical approach , the Hidden Markov Models (HMMs) to develop the software. The main advantage of using this technique is that it provides a simple and flexible mechanism for modelling sequences of variable length [1]. Broadly speaking, the mechanism of the system begins when a user speaks and the spoken word or utterance is recognized by the system automatically. The quality of a speech recognition system is usually measured for its accuracy [4]. Depending upon the accuracy the corrections will be suggested.



## TABLE OF CONTENTS

<b>DECLARATION.....</b>	<b>ii</b>
<b>APPROVAL FOR SUBMISSION.....</b>	<b>iii</b>
<b>ACKNOWLEDGEMENTS.....</b>	<b>v</b>
<b>ABSTRACT.....</b>	<b>vi</b>
<b>TABLE OF CONTENTS.....</b>	<b>vii</b>
<b>LIST OF TABLES.....</b>	<b>x</b>
<b>LIST OF FIGURES.....</b>	<b>xi</b>
<b>LIST OF SYMBOLS / ABBREVIATIONS.....</b>	<b>xiii</b>
<b>LIST OF APPENDICES.....</b>	<b>xiv</b>

### CHAPTER

<b>INTRODUCTION.....</b>	<b>1</b>
1.1Background.....	1
1.2Problem Statements.....	2
1.3Aims and Objectives.....	2
1.4Scope of Project.....	2
<b>LITERATURE REVIEW.....</b>	<b>3</b>
2.1Human Speaking, Listening and Understanding.....	3
2.1.1Human Speaking.....	3
2.1.2Human Listening and Understanding.....	4
2.2Automatic Speech Recognition.....	4
2.2.1Performance.....	5
2.2.2Speech Type.....	5
2.2.3Vocabulary size.....	5
2.2.4Speaker Dependency.....	6



	viii
2.3Hidden Markov Model.....	7
2.3.1Markov Chain.....	9
2.4Feature Extraction Techniques.....	9
2.5ASR Approaches.....	11
2.5.1Acoustic-Phonetic Approach.....	11
2.5.2Statistical Pattern-Recognition Approach.....	12
2.5.3AI Approach.....	13
2.6Related Work.....	14
2.6.1Hello_Arabic_Digit System.....	14
2.7CMUSphinx.....	16
2.7.1Introduction.....	16
2.7.2Sphinx 4.....	16
2.7.3Models.....	17
2.7.4Performance.....	18
2.7.5Sphinx 4 and HMM.....	20
2.7.6Architecture and Main Components.....	22
<b>DESIGN AND METHODOLOGY.....</b>	<b>24</b>
3.1Architecture.....	24
3.2Workflow.....	25
3.3Flow Chart.....	27
3.4File Sturcture Trees.....	28
3.5Tree Diagrams.....	33
3.6Methodology.....	36
3.6.1Iterative and incremental development.....	36
3.6.2Input.....	38
3.6.3Processing.....	39
3.6.4Output.....	40
3.7Graphical User Interface.....	40
3.7.1Reciting Interface Prototype.....	40
<b>IMPLMENTATION.....</b>	<b>42</b>
4.1Development Machine.....	42



	ix
4.2Sphinx-4 framework.....	42
4.2.1Sphinx-4 Usage.....	43
4.3Sphinx Train.....	43
4.3.1Sphinx Train Requirements.....	43
4.3.2Data Gathering.....	43
4.3.3Data Preparation.....	44
4.3.4Data Adapting.....	54
4.4Using the model.....	54
4.5Application / Prototype.....	55
4.5.1Source Code.....	55
<b>RESULTS AND DISCUSSIONS.....</b>	<b>70</b>
5.1Experimental Results and Discussions.....	70
5.1.1112 Arabic.....	70
5.1.2112 Syllable.....	71
5.1.3112 Phoneme.....	72
5.1.4112 Transliteration Syllable.....	73
5.1.4.1112 Transliteration Syllable Adaption.....	74
5.2Analysis.....	74
<b>CONCLUSION AND RECOMMENDATIONS.....</b>	<b>75</b>
6.1Conclusion.....	75
6.2Furure Work.....	75
<b>REFERENCES.....</b>	<b>76</b>
<b>APPENDICES.....</b>	<b>78</b>