

TABLE OF CONTENTS

APPROVAL PAGE	1
SELF DECLARATION AGAINST PLAGIARISM	2
ABSTRACT	3
ABSTRAK	4
ACKNOWLEDGMENTS	5
TABLE OF CONTENTS	6
LIST OF TABLES	8
LIST OF FIGURES	9
LIST OF TERMS	10
CHAPTER 1_ INTRODUCTION	11
1.1 Rationale.....	11
1.2 Theoretical Framework	13
1.3 Conceptual Framework/Paradigm.....	14
1.4 Statement of the Problem.....	14
1.5 Objective and Hypothesis.....	14
1.1 Assumption.....	15
2.1 Scope and Delimitation	15
3.1 Importance of the Study.....	15
CHAPTER 2_ REVIEW OF LITERATURE AND STUDIES	16
2.1 Related Literatures	16
2.1.1 Formalizing Arabic Inflectional and Derivational Verbs Based on Root and Pattern Approach Using Nooj Platform.....	16
2.1.2 Comparison between the Characteristics of Inflectional Systems in Arabic and English Languages.....	16
2.1.3 Neural Machine Translation by Jointly Learning to Align and Translate	16
2.1.4 Morphological Inflection Generation Using Character Sequence to Sequence	16
2.1.5 Ensembles of Neural Morphological Inflection Models.....	16
2.1.6 MED: The LMU System for the SIGMORPHON 2016 Shared Task on Morphological Reinflection	17
2.1.7 Arabic Morphological Generation from Interlingual	17

2.2	Related Studies	17
2.2.1	Reinfection Process	17
2.2.2	Recurrent Neural Network.....	17
2.2.3	Morphological process in Arabic.....	18
2.2.4	Arabic Word Classes.....	19
2.2.5	Dhamir.....	19
2.2.6	Wazan	20
2.2.7	Transliteration.....	23
2.2.8	The Morphosyntactic Description (MSD).....	23
CHAPTER 3 RESEARCH METHODOLOGY		24
3.1	Research Design.....	24
3.1.1	Research Procedures	24
3.1.2	Model Development.....	24
3.2	Population/Sampling	32
3.2.1	Data Resource	32
3.2.2	Additional Wazan to the Dataset.....	32
CHAPTER 4 IMPLEMENTATION AND RESULT ANALYSIS		33
4.1	System Implementation	33
4.1.2	Data Preprocessing.....	33
4.2	Analysis of the Data	34
4.3	Summary of Findings	34
4.4	Analysis of the experiment result.....	37
4.4.1	Error Analysis.....	37
CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS		39
5.1	Conclusions.....	39
5.2	Recommendations.....	39
BIBLIOGRAPHY		40
Appendix 1: List of Dimensions and Features Morphosyntactic Description (MSD).....		42