

TABLE OF CONTENTS

APPROVAL PAGE	ii
ORIGINALITY STATEMENT	iii
ABSTRACT	iv
PREFACE	v
ACKNOWLEDGEMENT	vi
TABLE OF CONTENT	vii
LIST OF FIGURES	ix
LIST OF TABLES	x
CHAPTER I INTRODUCTION	11
1.1 Background	11
1.2 Problem Formulation	12
1.3 Objectives.....	12
1.4 Problem Limitations.....	12
1.5 Research Methodology	13
CHAPTER II LITERATURE REVIEW	14
2.1 Brain and Seizures	14
2.2 Electroencephalogram	16
2.3 Convolutional Neural Network	17
2.4 One Dimensional Neural Network.....	19
2.5 Discussion	20
2.6 Miscellaneous Technologies	21
CHAPTER III SYSTEM PLANNING.....	23
3.1 Experimental Setup	23
3.2 System Design	23

3.1.1 Dataset	25
3.1.2 Preprocessing	26
3.1.3 Model Training and Testing	26
BAB IV TEST RESULT AND ANALYSIS	29
4.1 Test Result of One Convolutional Neural Network	29
4.1.1 Adam	29
4.1.2 Stochastic Gradient Descent	34
4.2 Analysis	38
BAB V CONCLUSION AND SUGGESTION	41
5.1 Conclusion	41
5.2 Suggestion	41
REFERENCES	42
APPENDIX	44