CONTENTS

APPROVAL PAGE ii
SELF DECLARATION AGAINST PLAGIARISM iii
ABSTRACT iv
CONTENTS v
LIST OF TABLES vii
LIST OF FIGURES viii
LIST OF ABBREVIATIONS ix
CHAPTER 1 Introduction 10
1.1 Background 10
1.2 Problem Identification 14
1.3 Objectives 15
1.4 Scope of Work 16
CHAPTER 2 Basic Concept 17
2.1 Pre-processing 17
2.1.1 CLAHE 17
2.2 Voting Classifier 18
CHAPTER 3 System Design 19
3.1 Thesis Work Flow 19
3.2 Datasets 20
3.2.1 NLM Dataset 20
3.2.2 Belarus Dataset 21
3.2.3 RSNA Dataset 21
3.3 Research Flowchart 22
3.4 Performance Parameter 24
RESULT & ANALYSIS 26
4.1 Datasets Analysis 26
4.2 Classifier Analysis 28
4.2.1 Accuracy Analysis 28
4.2.2 Loss Analysis 29

4.2.3 Specitifity & Sensitivity Analysis 30
4.2.4 AUC Analysis 31
4.2.5 NIH & Belarus Scenario 32
4.3 Study Comparison 33
CHAPTER 5 35
Conclusion 35
5.1 Conclusion 35
5.2 Future Work 36
REFERENCES 37