

# CONTENTS

<b>APPROVAL</b>	ii
<b>SELF DECLARATION AGAINST PLAGIARISM</b>	iii
<b>ABSTRACT</b>	iv
<b>ABSTRAK</b>	v
<b>DEDICATION</b>	vi
<b>ACKNOWLEDGMENTS</b>	vii
<b>CONTENTS</b>	viii
<b>LIST OF TABLES</b>	x
<b>LIST OF FIGURES</b>	xi
<b>LIST OF TERMS</b>	xii
<b>1 INTRODUCTION</b>	1
1.1 Background . . . . .	1
1.2 Theoretical Framework . . . . .	9
1.3 Conceptual Framework/Paradigm . . . . .	10
1.4 Statement of the Problem . . . . .	10
1.5 Objective and Hypotheses . . . . .	11
1.6 Assumption . . . . .	12
1.7 Scope and Delimitation . . . . .	12
<b>2 REVIEW OF LITERATURE AND STUDIES</b>	13
2.1 Model Characteristics . . . . .	13
2.2 Transfer Learning . . . . .	14
2.3 Ensemble Learning: Machine Learning Approaches . . . . .	14
2.4 Hate Speech Detection . . . . .	15
<b>3 RESEARCH METHODOLOGY</b>	19
3.1 Research Design . . . . .	19
3.2 Dataset Description . . . . .	20
3.2.1 System/product/method Implementation . . . . .	25
3.2.2 BERT . . . . .	26
3.2.3 BERT-CNN . . . . .	28

3.2.4	BERT-LSTM . . . . .	29
3.2.5	BERT-BiLSTM . . . . .	30
3.3	Evaluation Method . . . . .	32
3.3.1	Accuracy . . . . .	32
3.3.2	Precision . . . . .	32
3.3.3	Recall . . . . .	32
3.3.4	F1 Score . . . . .	33
<b>4</b>	<b>PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA</b>	<b>34</b>
4.1	Experiment on Varying Data Length . . . . .	34
4.2	Experiment on the Long Text Dataset . . . . .	36
4.3	Experiment on the Short Text Dataset . . . . .	37
4.4	Analysis of the experiment result . . . . .	38
<b>5</b>	<b>CONCLUSION AND RECOMMENDATIONS</b>	<b>40</b>
5.1	Conclusions . . . . .	40
5.2	Recommendations . . . . .	41
	<b>BIBLIOGRAPHY</b>	<b>42</b>