

## TABLE OF CONTENTS

DECLARATION .....	ii
ACKNOWLEDGEMENTS .....	iii
ABSTRACT .....	iv
ABSTRAK .....	v
TABLE OF CONTENTS .....	vi
LIST OF FIGURES .....	ix
LIST OF TABLES .....	x
LIST OF ABBREVIATIONS AND SYMBOLS .....	xi
1. INTRODUCTION .....	1
1.1. Background .....	1
1.2. Motivation .....	2
1.3. Research Problem.....	3
1.4. Objectives of the Research.....	4
1.5. Assumptions and Constraints .....	4
1.6. Scope of Research .....	5
1.7. Outline of Thesis .....	5
2. BACKGROUND & RELATED WORK .....	7
2.1. Sentiment Analysis & Classification.....	7
2.2. Sentiment Classification Approaches.....	9
2.2.1. Lexicon-based Approaches .....	9

2.2.2. Machine Learning Approaches .....	9
2.3. Summary .....	11
3. RESEARCH METHODOLOGY.....	12
3.1. Proposed Methodology .....	14
3.1.1. Data Set.....	15
3.1.2. Data Pre-processing & Training .....	18
3.1.3. Data Testing .....	19
3.1.4. Tools .....	20
4. IMPLEMENTATION.....	23
4.1. Stanford Parser Tagging.....	23
4.2. Position of Text .....	24
4.3. Processing of Tag Words .....	25
4.4. Classification.....	27
5. RESULTS & EVALUATION .....	29
5.1. Performance Metrics .....	29
5.1.1. Precision and Recall.....	29
5.1.2. F measure .....	30
5.2. Results & Discussion .....	30
6. CONCLUSION.....	36
6.1. Summary of Results .....	36
6.2. Research Contribution.....	36

6.3. Future Work .....	36
7. REFERENCES .....	38
APPENDIX A .....	42
A.1 PHP text script for extraction of tag word .....	42
APPENDIX B .....	45
B.1 Overview of Results .....	45
B.2 WEKA Classifier Output .....	49
B.2.1 Result for Classification based on Emotions.....	49
B.2.2 Result for Classification based on Polarity .....	58