

DAFTAR ISI

ABSTRAK	i
<i>ABSTRACT</i>	ii
LEMBAR PENGESAHAN	iii
LEMBAR PERNYATAAN ORISINALITAS	iv
HALAMAN PERSEMBAHAN	v
KATA PENGANTAR	vi
DAFTAR ISI.....	vii
DAFTAR GAMBAR	xii
DAFTAR TABEL.....	xiii
DAFTAR SIMBOL.....	xiv
DAFTAR ISTILAH	xvi
BAB I PENDAHULUAN.....	1
I.1 Latar Belakang	1
I.2 Perumusan Masalah.....	7
I.3 Tujuan Penelitian.....	7
I.4 Batasan Penelitian	7
I.5 Manfaat Penelitian.....	8
I.6 Sistematika Penulisan.....	8
BAB II TINJAUAN PUSTAKA.....	10
II.1 Media Sosial	10
II.2 YouTube	10
II.3 <i>Natural Language Processing</i>	11
II.4 <i>Data Mining</i>	12
II.5 Analisis Sentimen.....	14
II.6 <i>Machine Learning</i>	17

<i>II.7 Data Preprocessing</i>	18
<i>II.7.1 Labelling</i>	19
<i>II.7.2 Case Folding</i>	20
<i>II.7.3 Unwanted Character Removal</i>	20
<i>II.7.4 Text Abbreviation Correction</i>	21
<i>II.8 Augmentation</i>	22
<i>II.9 Model Convolutional Neural Network (CNN)</i>	23
<i>II.10 Model Bidirectional Long Short-Term Memory (Bi-LSTM)</i>	26
<i>II.11 Model CNN Bi-LSTM</i>	29
<i>II.12 Class Weight</i>	29
<i>II.13 Confusion Matrix</i>	30
<i>II.14 Receiver Operating Characteristic (ROC)</i>	32
<i>II.15 Hamming Loss</i>	33
<i>II.16 Flask</i>	35
<i>II.17 Perbandingan Algoritma Klasifikasi</i>	36
<i>II.18 Penelitian Terdahulu</i>	37
BAB III METODOLOGI PENELITIAN	40
<i>III.1 Kerangka Konseptual Model</i>	40
<i>III.2 Metode Penelitian</i>	41
<i>III.3 Sistematika Penyelesaian Masalah</i>	42
<i>III.3.1 Business Understanding</i>	44
<i>III.3.2 Data Understanding</i>	44
<i>III.3.3 Data Preparation</i>	45
<i>III.3.4 Modeling</i>	46
<i>III.3.5 Evaluation</i>	46
<i>III.3.6 Deployment</i>	47

BAB IV ANALISIS DAN PERANCANGAN	48
IV.1 <i>Business Understanding</i>	48
IV.2 <i>Data Understanding</i>	49
IV.3 <i>Data Preparation</i>	51
IV.3.1 <i>Data Cleaning</i>	52
IV.3.2 <i>Labelling</i>	55
IV.3.3 <i>Augmentation</i>	56
IV.3.4 <i>Tokenizing</i>	58
IV.3.5 <i>Data Splitting</i>	59
IV.3.6 <i>Class Weight</i>	60
BAB V IMPLEMENTASI DAN PENGUJIAN.....	63
V.1 <i>Modeling</i>	63
V.1.1 Hasil Implementasi CNN	63
V.1.2 Hasil Implementasi Bi-LSTM.....	67
V.1.3 Hasil Implementasi CNN Bi-LSTM	74
V.2 <i>Evaluation</i>	77
V.2.1 <i>Confusion Matrix</i>	78
V.2.2 <i>Area Under Cruve (AUC)</i>	86
V.2.3 <i>Hamming Loss</i>	89
V.2.4 Perbandingan Hasil Evaluasi Model	93
V.3 <i>Deployment</i>	98
V.3.1 <i>Deployement Website</i>	98
V.3.2 Analisis Sentimen	100
BAB VI KESIMPULAN DAN SARAN	109
VI.1 Kesimpulan	109
VI.2 Saran	110

Daftar Pustaka	111
----------------------	-----