

## DAFTAR ISI

ABSTRAK.....	i
<i>ABSTRACT</i> .....	ii
LEMBAR PENGESAHAN .....	iii
LEMBAR PERNYATAAN ORISINALITAS .....	iv
KATA PENGANTAR .....	v
DAFTAR ISI.....	vi
DAFTAR GAMBAR .....	x
DAFTAR TABEL.....	xii
DAFTAR SIMBOL.....	xiii
DAFTAR ISTILAH .....	xiv
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 Pemilu Presiden dan Wakil Presiden.....	10
II.2 YouTube .....	11
II.3 <i>Data Mining</i> .....	11
II.4 <i>Text Mining</i> .....	12
II.5 <i>Natural Language Processing</i> .....	13
II.6 Analisis Sentimen.....	14

II.7	<i>Analisis Sentimen Berbasis Lexicon</i> .....	14
II.8	<i>Machine Learning</i> .....	15
II.9	<i>Data Preprocessing</i> .....	17
II.9.1	<i>Case Folding</i> .....	18
II.9.2	<i>Unwanted Characters Removal</i> .....	19
II.9.3	<i>Tokenization</i> .....	20
II.9.4	<i>Normalization</i> .....	20
II.9.5	<i>Stop word Removal</i> .....	20
II.9.6	<i>Stemming dan Lemmatization</i> .....	21
II.10	<i>Term Frequency-Inverse Document Frequency (TF-IDF)</i> .....	22
II.11	<i>Support Vector Machine (SVM)</i> .....	24
II.12	<i>Confusion Matrix</i> .....	26
II.13	<i>Kurva ROC-AUC</i> .....	27
II.14	<i>Co-occurrence Network</i> .....	28
II.15	<i>Perbandingan Algoritma Klasifikasi</i> .....	30
II.16	<i>Penelitian Terdahulu</i> .....	32
BAB III	<b>METODOLOGI PENELITIAN</b> .....	37
III.1	<i>Kerangka Berpikir</i> .....	37
III.2	<i>Sistematika Penyelesaian Masalah</i> .....	38
BAB IV	<b>ANALISIS DAN PERANCANGAN</b> .....	42
IV.1	<i>Initialization</i> .....	42
IV.2	<i>Data Selection</i> .....	43
IV.3	<i>Data Preprocessing</i> .....	44
IV.3.1	<i>Case Folding</i> .....	44
IV.3.2	<i>Penghapusan Angka</i> .....	45
IV.3.3	<i>Penghapusan URL</i> .....	47

IV.3.4	Penghapusan Simbol .....	48
IV.3.5	Penghapusan <i>Whitespace</i> .....	49
IV.3.6	<i>Tokenization</i> .....	51
IV.3.7	<i>Normalization</i> .....	52
IV.3.8	Penghapusan <i>Stop Word</i> .....	54
IV.3.9	<i>Stemming</i> .....	56
IV.3.10	<i>Labelling</i> .....	57
IV.4	<i>Data Transformation</i> .....	64
IV.4.1	<i>Term Frequency – Inverse Document Frequency (TF-IDF)</i> .....	64
IV.4.2	<i>Splitting Data</i> .....	69
IV.5	Klasifikasi Menggunakan <i>Support Vector Machine (SVM)</i> .....	70
IV.6	<i>Interpretation/Evaluation</i> .....	73
IV.6.1	<i>Confusion Matrix</i> .....	73
IV.6.2	<i>Classification Report</i> .....	74
IV.6.3	Kurva ROC dan AUC .....	75
IV.6.4	Interpretasi dengan <i>Co-occurrence Network</i> .....	76
BAB V	IMPLEMENTASI DAN PENGUJIAN.....	78
V.1	Model Klasifikasi Algoritma SVM .....	78
V.1.1	Model Klasifikasi SVM <i>Dataset Anies – Muhaimin</i> .....	78
V.1.2	Model Klasifikasi SVM <i>Dataset Prabowo - Gibran</i> .....	80
V.1.3	Model Klasifikasi SVM <i>Dataset Ganjar – Mahfud</i> .....	81
V.2	Evaluasi Performa Model.....	83
V.2.1	<i>Confusion Matrix</i> .....	83
V.2.1.1	<i>Confusion Matrix</i> Pelabelan Manual .....	84
V.2.1.2	<i>Confusion Matrix</i> Pelabelan <i>Lexicon</i> .....	86
V.2.1.3	Rangkuman <i>Confusion Matrix</i> Pelabelan Manual .....	89

V.2.1.4	Rangkuman <i>Confusion Matrix</i> Pelabelan <i>Lexicon</i> .....	91
V.2.2	<i>Classification Report</i> .....	92
V.2.2.1	<i>Classification Report</i> Pelabelan Manual.....	92
V.2.2.2	<i>Classification Report</i> Pelabelan <i>Lexicon</i> .....	94
V.2.3	Kurva ROC-AUC.....	95
V.2.3.1	Kurva ROC-AUC Pelabelan Manual.....	95
V.2.3.2	Kurva ROC-AUC Pelabelan <i>Lexicon</i> .....	98
V.2.4	Analisis Performa Model .....	101
V.3	Visualisasi <i>Co-occurrence Network</i> .....	103
BAB VI	KESIMPULAN DAN SARAN .....	107
VI.1	Kesimpulan .....	107
VI.2	Saran .....	108
DAFTAR PUSTAKA	.....	109