

## DAFTAR ISI

ABSTRAK .....	i
<i>ABSTRACT</i> .....	ii
LEMBAR PENGESAHAN .....	iii
LEMBAR PERNYATAAN ORISINALITAS .....	iv
KATA PENGANTAR .....	v
DAFTAR ISI.....	vii
DAFTAR GAMBAR .....	x
DAFTAR TABEL.....	xi
DAFTAR ISTILAH .....	xii
DAFTAR LAMPIRAN .....	xiii
BAB I PENDAHULUAN .....	1
I.1    Latar Belakang .....	1
I.2    Rumusan Masalah .....	4
I.3    Tujuan Penelitian.....	4
I.4    Batasan Penelitian .....	4
I.5    Manfaat Penelitian.....	5
I.6    Sistematika Penulisan.....	5
BAB II TINJAUAN PUSTAKA .....	7
II.1    Penelitian Terdahulu.....	7
II.2    Twitter .....	11
II.3    Vaksinasi .....	12
II.4    Covid-19 .....	12
II.5 <i>Data Mining</i> .....	13
II.6 <i>Text Mining</i> .....	14
II.7 <i>Data Preprocessing</i> .....	14

II.8	<i>Sentimen Analysis</i> .....	15
II.9	<i>Support Vector Machine</i> .....	15
II.10	<i>Random Forest</i> .....	16
II.11	<i>Vader Sentiment Analyzer</i> .....	16
II.12	<i>Textblob</i> .....	17
II.13	<i>K-fold Cross Validation</i> .....	17
II.14	<i>Confusion matrix</i> .....	18
II.15	<i>Receiver Operating Characteristic (ROC)</i> .....	18
BAB III	METODOLOGI PENELITIAN .....	20
III.1	Kerangka Berpikir .....	20
III.2	Sistematika Penyelesaian Masalah .....	21
III.3	Pengumpulan Data .....	23
III.4	Pengolahan Data atau Pengembangan Produk / Artifak .....	24
III.5	Metode Evaluasi .....	25
III.6	Alasan Pemilihan Metode .....	26
BAB IV	ANALISIS DAN PERANCANGAN .....	27
IV.1	Pengumpulan Data .....	27
IV.2	<i>Data Preprocessing</i> .....	29
IV.2.1	<i>Data Cleansing</i> .....	29
IV.2.2	<i>Tokenization</i> .....	31
IV.2.3	<i>Stopwords Removal</i> dan <i>Stemming</i> .....	32
IV.3	<i>Data Labelling</i> .....	34
IV.4	<i>Data Splitting</i> .....	38
IV.5	Ekstraksi TF-IDF .....	38
BAB V	HASIL DAN EVALUASI .....	40
V.1	<i>Dataset</i> .....	40

V.2	Implementasi Model .....	40
V.2.1	Model dengan Algoritma <i>Support Vector Machine</i> .....	40
V.2.2	Model dengan Algoritma <i>Random Forest</i> .....	41
V.3	<i>K-fold Cross Validation</i> .....	43
V.4	Evaluasi <i>Performance</i> .....	44
V.4.1	<i>Confusion matrix</i> .....	44
V.4.2	<i>Receiver Operating Characteristic</i> (ROC) .....	59
V.5	Analisis Sentimen.....	62
V.5.1	<i>Vader Sentiment Analyzer</i> .....	63
V.5.2	<i>Textblob</i> .....	65
V.6	<i>Wordcloud</i> .....	68
V.6.1	<i>Vader Sentiment Wordcloud</i> .....	69
V.6.2	<i>Textblob Wordcloud</i> .....	70
BAB VI	KESIMPULAN DAN SARAN .....	72
VI.1	Kesimpulan.....	72
VI.2	Saran .....	72
	DAFTAR PUSTAKA .....	74
	LAMPIRAN .....	77