

DAFTAR ISI

SURAT PERSETUJUAN	i
SURAT PENGESAHAN	ii
SURAT PERNYATAAN	iii
LEMBAR PERSEMBAHAN	v
ABSTRAK	vii
ABSTRACT	viii
KATA PENGANTAR	ix
DAFTAR ISI	xi
DAFTAR GAMBAR	xv
DAFTAR ISTILAH	xvii
DAFTAR LAMPIRAN	xix
BAB I	1
PENDAHULUAN	1
1.1 Latar Belakang Penelitian	1
1.2 Rumusan Masalah Penelitian	3
1.3 Tujuan Tujuan Penelitian	4
1.4 Batasan Masalah Penelitian	4
1.5 Kerangka Pemikiran Penelitian	4
1.6 Sistematika Penulisan	6
BAB II	8
KAJIAN LITERATUR	8
2.1 Tinjauan Pustaka	8
2.2 Landasan Teori	11
2.2.1 Pengolahan Citra Digital	11
2.2.2 <i>Artificial Intelligence, Machine Learning dan Deep Learning</i>	12
2.2.3 <i>Atopic Dermatitis</i>	13
2.2.4 <i>Convolutional Neural Network</i>	15
2.2.4.1 <i>Convolutional Layer</i>	16
2.2.4.2 <i>Pooling Layer</i>	16
2.2.4.3 <i>Fully Connected Layer</i>	17
2.2.4.4 <i>Activation Function – Rectified Linear Unit (ReLU)</i>	18

2.2.5	EfficientNet.....	18
2.2.6	Transfer Learning.....	20
2.2.7	Gradient -weighted Class Activation Map (Grad-CAM)	21
2.2.8	Dataset	23
2.2.9	Evaluasi Model.....	24
2.2.10	CRISP-DM.....	26
2.2.10.1	Business Understanding	26
2.2.10.2	Data Understanding	27
2.2.10.3	Data Preparation	27
2.2.10.4	Modeling	27
2.2.10.5	Evaluation	27
2.2.10.6	Deployment	27
BAB III		28
METODOLOGI PENELITIAN		28
3.1	Business Understanding	29
3.1.1	Determine Business Objectives.....	29
3.1.2	Assess Situation.....	29
3.1.3	Determine Data Mining Goals.....	29
3.1.4	Produce Project Plan	30
3.2	Data Understanding	30
3.2.1	Collect Initial Data.....	31
3.2.2	Describe Data	31
3.2.3	Explore Data	31
3.2.4	Verify Data Quality	32
3.3	Data Preparation	32
3.3.1	Select Data	32
3.3.2	Data Preprocessing	32
3.4	Modeling.....	33
3.4.1	Select Modeling Techniques	33
3.4.2	Generate Test Design	36
3.4.3	Build Model.....	36
3.4.4	Assess Model	37

3.5	<i>Evaluation</i>	38
3.5.1	<i>Evaluate Result</i>	38
3.5.2	<i>Review Process</i>	39
3.5.3	<i>Determine Next Step</i>	40
3.6	<i>Finalization dan Recommendation</i>	40
3.6.1	<i>Summary Result</i>	40
3.6.2	<i>Model Limitations</i>	40
3.6.3	<i>Recommendations for Further Development</i>	41
BAB IV		42
HASIL DAN PEMBAHASAN		42
4.1	<i>Hasil</i>	42
4.2	<i>Business Understanding</i>	42
4.2.1	<i>Determine Business</i>	42
4.2.2	<i>Assess Situation</i>	42
4.2.3	<i>Determine Data Mining Goals</i>	43
4.2.4	<i>Produce Project Plan</i>	43
4.3	<i>Data Understanding</i>	44
4.3.1	<i>Collect Initial Data</i>	44
4.3.2	<i>Describe Data</i>	44
4.3.3	<i>Explore Data</i>	46
4.3.4	<i>Verify Data Quality</i>	48
4.4	<i>Data preparation</i>	49
4.4.1	<i>Select Data</i>	49
4.4.2	<i>Data Preprocessing</i>	49
4.5	<i>Modeling</i>	51
4.5.1	<i>Select Modeling Techniques</i>	51
4.5.2	<i>Generate Test Design</i>	51
4.5.3	<i>Build Model</i>	52
4.5.4	<i>Assess Model</i>	56
4.6	<i>Evaluation</i>	61
4.6.1	<i>Evaluate Result</i>	61
4.6.2	<i>Review Process</i>	64

4.6.3	<i>Determine Next Step</i>	65
4.7	<i>Finalization and Recommendation</i>	66
4.7.1	<i>Summary Result</i>	66
4.7.2	<i>Model Limitations</i>	66
4.7.3	<i>Recommendations for Further Development</i>	67
BAB V		69
5.1	Simpulan	69
5.2	Saran	70
DAFTAR PUSTAKA		70
LAMPIRAN		73

