

# Determining Atopic Dermatitis (AD) Visual Attributes in Type I–Type VI Skin Tones

## 1 ATOPIC DERMATITIS VISUAL ATTRIBUTES



Erythema

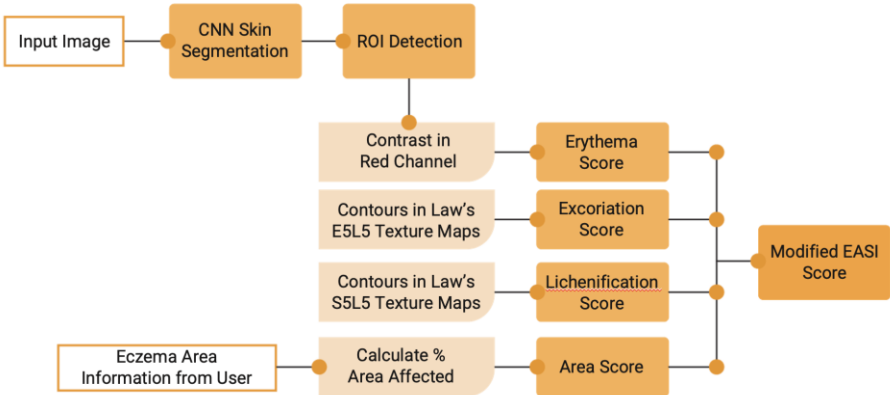


Excoriation



Lichenification

## 2 OVERVIEW OF HOW THE ALGORITHMS WORK



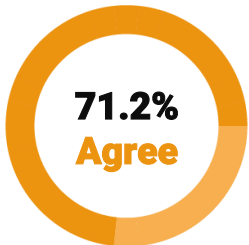
## 3 MODEL METRICS INDICATE IT HAS MEDICAL RELEVANCE

	Accuracy	Precision	Recall	F1-Score
Erythema Score	84%	88%	86%	87%
Excoriation Score	72%	83%	71%	71%
Lichenification Score	77%	85%	80%	78%
<b>Average</b>	<b>77.7%</b>	<b>85.3%</b>	<b>79.0%</b>	<b>78.7%</b>

## 4 DERMATOLOGISTS AND AI HAVE SUBSTANTIAL AGREEMENT



Erythema



Excoriation



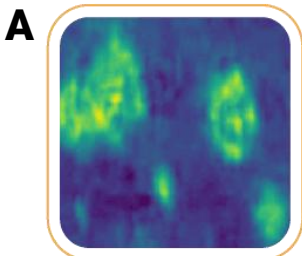
Lichenification

Substantial Agreement (Cohen's Kappa)

## 5 ERYTHEMA CAN BE DETECTED IN DARKER SKIN TONES BY AI



Input Image



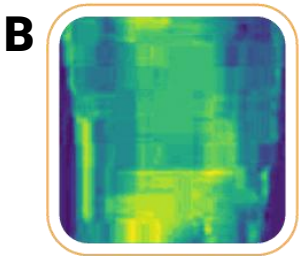
Erythema Map

DERM: Grade 3

AI/ML: Grade 3



Input Image



Erythema Map

DERM: "Unable to Assess"

AI/ML: Grade 1