

Date	8 October 2022
Team ID	PNT2022TMID18710
Project Name	AI-based localization and classification of skin disease with erythema
Maximum marks	2 marks

S. N O	PAPER	AUTHOR	YEAR	ACCURACY	METHOD AND ALGORITHM
1.	AI-based localization and classification of skin disease with erythema	Ha Min Son, Wooho Jeon, Jinhyun Kim, Chan-Yeong Heo, Hye Jin Yoon, Ji Ung Park, Tai-Myoung Chung.	2021	93.5%	This model shows that CAD may also be a viable option in dermatology by presenting a novel method to sequentially combine accurate segmentation and classification models. Given an image of the skin, we decompose the image to normalize and extract high-level features. Using a neural network-based segmentation model to create a segmented map of the image, we then cluster sections of abnormal skin and pass this information to a classification model.
2.	Skin Disease Detection And Classification	V.Pugazhenthir, Sagar K. Naik, Amruta D.Joshi, Shreya S. Manerkar	2019	90.15%	Global Thresholding technique is used to segment the pre processed image through which the actual affected region is obtained. Texture features, such as Energy, Entropy, Contrast, IDM, are extracted from the segmented image using Grey Level Co-occurrence Matrix. Image Quality Assessment features such as MSE and PSNR are extracted. The extracted texture features

					will be used to detect the presence of skin disease and classify the disease as melanoma, leprosy or eczema, if present, using the Decision tree technique.
3.	Skin Disease Recognition Method Based on Image Color and Texture Features	Quan Gan, Tao Ji.	2018	92.25%	The method of grey-level co-occurrence matrix (GLCM) was introduced to segment images of skin disease. The texture and color features of different skin disease images could be obtained accurately. Finally, by using the support vector machine (SVM) classification method, three types of skin diseases were identified. The experimental results demonstrate the effectiveness and feasibility of the proposed method.
4.	Automatic skin disease diagnosis using deep learning from clinical image and patient information	K.A.Muhab a,K. Dese, T. M. Aga, F. T. Zewdu, G. L. Simegn.	2021	96%	In this model, an automated system is proposed for the diagnosis of five common skin diseases by using data from clinical images and patient information using deep learning pre-trained mobilenet-v2 model. Clinical images were acquired using different smartphone cameras and patient's information were collected during patient registration. Different data pre processing and augmentation techniques were applied to boost the performance of the model prior to training.