

LITERATURE SURVEY

Paper title	Author	Proposed solution	Advantage	Limitations
Skin Diseases Classification Using Hybrid AI Based Localization Approach.	Keshetti Sreekala	This paper implements that the Structural Co-Occurrence matrices for feature extraction in the skin diseases classification and the preprocessing techniques are handled by using the Median filter and the skin diseases are diagnosed by using the Hybrid deep neural network for diagnosis and the datasets are classified by using the MobileNet.	The Features extraction is used to remove some noise from the images and the preprocessing is used to improve the accuracy of the classification.	In SVM it's better to scale the data always; because it will extremely improve the results.
Deep Learning Approaches Towards Skin Lesion Segmentation and Classification from Dermoscopic Images	Baig R, Bibi M, Hamid A, Kausar S, Khalid S.	The paper presented the comparative analysis of state of the art techniques, model and methodologies. Malignant melanoma is one of the most threatening and deadliest cancers. Since the last few decades, researchers are putting extra attention and effort in accurate diagnosis of melanoma. The main challenges of dermoscopic skin lesion images are: low contrasts, multiple lesions, irregular and fuzzy borders, blood vessels, regression, hairs, bubbles, variegated coloring and other kinds of distortions.	It is expected to improve results by utilizing the capabilities of deep learning frameworks with other pre and post processing techniques so reliable and accurate diagnostic systems can be built.	It also leaves the programmers clueless when they try to understand why certain aspects fail. Generally, deep learning algorithms sift through millions of data points to find patterns and correlations that often go unnoticed by human experts.

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The mathematics of erythema: Development of machine learning models for artificial intelligence assisted measurement and severity scoring of radiation induced dermatitis	RahulRanjan Richard RicardaErhart NithinKurup HaraldSchnidar	The objective of the single-center study was to develop machine learning and deep learning approaches for automatic classification of RISRs. Scarletred® Vision, a novel and state-of-the-art digital skin imaging method capable of remote monitoring and objective assessment of acute RISRs was used to convert 2D digital skin images using the CIELAB color space and conduct SEV* measurements.	A set of different machine learning and deep convolutional neural network-based algorithms has been explored for the automatic classification of RISRsA total of 2263 distinct images from 209 patients were analyzed for training and testing the machine learning algorithms.	For estimating the severity grade of each class is required.Ensemble learning combines several individual predictions are needed to obtain.
A Simplified Approach for Melanoma Skin Disease Identification	G. Glorindal,S. Arun Mozhiselvi,T. Ananth Kumar,K. Kumaran	An image processing approach with an easily driven Application Programmable Interface commonly known as API, has been proposed to diagnose skin diseases at their earlier stages.	The image processing follows preprocessing, segmentation, feature extraction, and classification steps, which apply contrast stretching and median filter, Fuzzy CMeans,Grey Level CoOccurrence Matrix(GLCM), and Gabor filter, Support Vector Machine .	It also leaves the programmers clueless when they try to understand why certain aspects fail. Generally, deep learning algorithms sift through millions of data points to find patterns and correlations that often go unnoticed by human experts.

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Skin Disease Image Recognition	Ling-Fang Li, Xu Wang, Wei-Jian Hu	The skin disease image recognition method based on deep learning is better than those of dermatologists and other computer-aided treatment methods in skin disease diagnosis.	A set of different machine learning and deep convolutional neural network-based algorithms has been explored for the automatic classification of RISRsA total of 2263 distinct images from 209 patients were analyzed for training and testing the machine learning algorithms.	Many skin diseases have highly similar visual characteristics, which add more challenges to the selection of useful features from the image.
Effective diagnosis mechanism for skin disorders using image mining techniques.	Poornima.G & Sakkari. D. S	The first stage of the model requires the compilation of datasets and augmentation of data. The dataset was entirely created by us collecting the photos from different sites of various disorders. The original dataset consisted of 30 images, 150 after augmentation.Second stage of the model involves in extracting features from the skin disorder images by using various image processing techniques.Third stage of the model involves in classifying skin disorder images.	The publishers have clearly used image processing methods to accomplish the mission of pre-processing. The classification tasks can be made much easier and more productive by defining this pattern.	Dataset size is Small and accuracy of the classification is not satisfied.