AI-based localization and classification of skin disease with erythema

Literature Survey

S.NO	Authors	Topic	Model	Advantages	Disadvantages
1	T. Shanthi et.al	Automatic diagnosis of skin diseases using convolution neural network	The method proposed in this work classifies four types of skin diseases using computer vision. The proposed approach involves Convolutional Neural Networks with specific focus on skin disease.	A learning rate of 0.01 achieved an accuracy of 85.7%, 92.3%, 93.3% and 92.8% for the skin diseases such as acne, keratosis, Eczema herpeticum and utricaria respectively	It can be further extended to find where exactly the disease is present using object detection or by using segmentation
2	Belal Ahmad et al	Discriminative Feature Learning for Skin Disease Classification Using Deep Convolutional Neural Network	They Proposed a new framework by fine-tuning layers of ResNet152 and InceptionResNet-V2 models with a triplet loss function.	This paper achieved 87 % accuracy with 12,000 images with a total of four types of skin diseases.	It can be trained with a large dataset with a greater number of types of skin diseases.
3	Ha Min Son et.al	AI-based localization and classification of skin disease with erythema	This study proposes a novel method to sequentially combine accurate segmentation and classification models using CNN U-Net Architecture	This Paper Achieved 87% Accuracy with 15,000 images with four types of skin diseases and segmentation helps to find the localization of patches	It can be trained with a greater number of skin disease classes and use object detection algorithms to find their localization
4	L. G. Kabaria et al	Diagnosing Skin Diseases Using an Artificial Neural Network	This paper deals with the construction and training of an artificial neural network for skin disease diagnosis (SDD) based on patients' symptoms and causative organisms	The ANN constructed using a feed-forward architectural design is shown to be capable of successfully diagnosing selected skin diseases in the tropical areas such as Nigeria with 90 percent accuracy	This ANN model works only well for the tropical areas.