

AUTOMATED DIFFERENTIAL DIAGNOSIS OF RINGWORM AND ECZEMA

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Abstract

Misdiagnosis of dermatological disorders is a normal incident among both doctors and dermatologists around the world. Among them, misdiagnosis of common dermatological disorders is exceptionally high since these types of common diseases appear visually similar on some occasions. Then these easily curable diseases can get devastating complicated due to the initial misdiagnosis and wrong treatments. Ringworm and eczema are two commonly misdiagnosed dermatological diseases that often display similar visual attributes as well as non-visual attributes. For this research, these two diseases were chosen to differentially diagnose using an image-based system. In the proposed system, the end-users were allowed to upload an image to the system and using different image processing techniques the lesion area will be detected. Then the image will be classified using a deep neural network that was trained using a dataset and will display the diagnosis result. To give a better experience, an android application was designed and developed as the frontend of the system.

Key Words:

Deep Learning, Image Processing, Convolutional Neural Network