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Detection of Skin Disease by using Image Processing

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Abstract: There are many types and forms of skin diseases and have many causes, including internal ones related to hormones and body glands such as acne, or external related to air pollution or sensitivity to sunlight such as rashes. The skin disease may be contagious, such as scabies and lice, or it may not be contagious, such as drug allergy and rosacea, or it may be chronic, such as psoriasis and atopic eczema, or it may be rare, such as sweet syndrome and ofuji disease. The outlook of society, in general, reduces the importance of skin disease when it appears and it is preferable not to visit the doctor. Skin diseases are a major and worrying problem in societies due to their physical and psychological effects on patients. Detecting skin diseases at an early stage has an important role in treatment. The process of diagnosing and treating skin injury is related to the skill and experience of the specialist doctor, skin disease prediction by using a neural network based on image analysis. Diagnosis and prediction of skin disease take a very long process because it requires a patient's history, physical examination, and proper laboratory diagnostic tests. st of such diagnosis is still limited and very expensive. So, image processing techniques help to build automated screening system for dermatology at an initial stage. The extraction of features plays a key role in helping to classify skin disease, proach works on the inputs of a color image. Then resize the of the image to extract features using pre trained convolutional neural network. After that classified feature using Multiclass SVM. Finally, the results are shown to the user, including the type.

Keywords: Skin Disease, Neural network, Image processing, Feature Extraction, CNN, Machine Learning, Soft-max Classifier, Dermatology

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