Face Skin Disease Detection and Community based Doctor Recommendation System

Udara M.A.A.¹, Wimalki Dilshani D.G.¹, Mahalekam M.S.W.¹, Wickramaarachchi V.Y.¹, Jenny Krishara² and Dinuka Wijendra²

¹Department of Software Engineering, Sri Lanka Institute of Information Technology, Sri Lanka.

²Department of Information Technology, Sri Lanka Institute of Information Technology, Sri Lanka. it16549364@my.sliit.lk, it19181134@my.sliit.lk, it19113746@my.sliit.lk, it19141466@my.sliit.lk, jenny.k@sliit.lk, dinuka.w@sliit.lk

Abstract

In our country, skin diseases are more common than other diseases because of the climate. Skin diseases are occurring almost on all groups of ages among people. It is one of the most common types of diseases where some can be painful, and some can cause fatal to human life. The delay of the disease detection, difficulties of identify the infected area, ignorance of the spread of the disease and treatments may threat to the patients life. Most of the time this process is performed manually which can lead to human errors and takes days for providing the results. This paper reports a smart solution that assists the patients by detecting the disease, identify the current infected area of the disease, recommend best doctors, provide community based prevention guidelines, and predict the future risk. Also due to this economic crisis, we suggest that it's much easier if the patient can do these skin check-ups systematically to continuously monitor and detect skin disease to get proper medical attention. As treatment procedures can be different from each doctor and impact will be different, we are working on community-based platform where we can get patients' reviews about doctors and preventive guidelines. Depending on the performance evaluations, the results obtained from the proposed method for disease identifications are in the range of 90% - 95% of accuracy.

Keywords

Skin Diseases, Xception, U-Net, CNN, LSTM, Transformers, NER