Skin Disease Analysis and Prediction using Machine Learning

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Abstract: *A number of patients all over the world suffer from skin diseases; detection in the early stages is very important for curing such disease. For diagnosing skin conditions however, several factors make this very difficult, these include the multitude of skin diseases, their similar symptoms and dependence on expert dermatological evaluation. In this case, adopting machine learning (ML) is quite a suitable approach as it can help improve the accuracy of diagnosis and its availability. Therefore, the focus of the project is on the developing of a machine learning based skin disease detection system.The problem in consideration is the high demand for efficient and effective mechanisms that can be used in skin disease identification/ detection, whereby such tools should also be able to be used in low income areas. To tackle this, we use a machine learning model which classifies different forms of skin diseases through the use of dermatoscopic images.*

Keywords: Machine Learning, Crop Recommendation, Random Forest, Gradient Boosting, AdaBoost, Sustainable Agriculture, IoT Integration, Data-Driven Agriculture