

AI Powered Skin Cancer Detection and Virtual Dermatology Support System using Pre-Trained CNN Algorithm

Dr. K. Mohan¹, R. Gajalakshmi², S. Janani³

HOD/Associate Professor, Department of Information Technology¹
Students, B.Tech. Final Year, Department of Information Technology^{2,3}
Anjalai Ammal Mahalingam Engineering College, Thiruvavur, India

Abstract: *This paper proposes an AI-powered system for skin cancer detection and virtual dermatology support using a pre-trained Convolutional Neural Network (CNN) algorithm. The research addresses the challenges of automatic skin cancer classification, such as the complexity and diversity of skin disease images and the interclass similarities among different skin lesions. The proposed system utilizes the VGG16 deep learning model to classify diseases with an improved accuracy rate. It also includes a chat interface to provide diagnostic information about classified diseases. The system aims to overcome limitations of existing methods, such as irrelevant feature extraction, difficulty in classifying multiple skin cancer images, misclassification errors, and the need for manual segmentation*

Keywords: CNN Algorithm, Virtual Dermatology Support System, VGG16, Chabot, NLP

