Major Project Report

On

Skin Lesion Classification for Disease Detection

Submitted in partial fulfillment of the requirements for the award of degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE & ENGINEERING (Artificial Intelligence & Machine Learning)

by

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BVRIT HYDERABAD COLLEGE OF ENGINEERING FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)
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Bachupally, Hyderabad – 500090
2023-24

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CERTIFICATE

This is to certify that the project entitled "Skin Lesion Classification for Disease Detection" is a bonafide work carried out by Ms. B. Tanmayee (20WH1A6603), Ms. P. Abheesta(20WH1A6604), Ms. G. Spurthy Vahini (20WH1A6605), Ms. M. Devi Sri Chandana(20WH1A6624), Ms. M. Ashwini(21WH5A6605) in partial fulfillment for the award of B.Tech degree in Computer Science & Engineering (AI&ML), BVRIT HYDERABAD College of Engineering for Women, Bachupally, Hyderabad, affiliated to Jawaharlal Nehru Technological University Hyderabad, Hyderabad under my guidance and supervision. The results embodied in the project work have not been submitted to any other University or Institute for the award of any degree or diploma.

Internal Guide

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DECLARATION

We hereby declare that the work presented in this project entitled "Skin lesion classification for disease detection" submitted towards completion of Project work in IV Year of B.Tech of CSE(AI&ML) at BVRIT HYDERABAD College of Engineering for Women, Hyderabad is an authentic record of our original work carried out under the guidance of Mr. B. Kishore Kumar, Asst. Prof, Dept of CSE(AI&ML)

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ABSTRACT
Skin cancer, encompassing various types, presents a diagnostic challenge due to diverse morphological features. Timely identification of skin lesions is crucial for effective medical intervention. Traditional methods, reliant on visual inspection and invasive procedures, may result in delayed or inaccurate diagnoses. This project proposes a solution using deep learning, specifically Convolutional Neural Networks (CNNs), to automate skin lesion classification. Leveraging diverse datasets and transfer learning, the model learns intricate patterns, facilitating accurate disease identification. The objective is to provide a scalable, objective, and accessible tool, potentially reducing dependence on subjective interpretations and enabling early intervention for dermatological conditions.

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