



NARASARAOPETA ENGINEERING COLLEGE: NARASARAOPET

(Autonomous)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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Guide	Marella Venkatrao
Title	Skin Disease Prediction
Domain/Technology	Deep Learning
Dataset Link	https://www.kaggle.com/datasets/kmader/skin-cancer-mnist-ham10000
Base Paper Link	https://ieeexplore.ieee.org/document/10127569
Software Requirements	Browser : Any Latest browser like Chrome Operating System : Windows 10 Language : Python Platform : Visual Studio Code
Hardware Requirements	Processor : Intel(R) Core™2 i7-5500U CPU @ 2.50GHz RAM : 8GB(gigabyte) System Type : 64-bit operating system, x64-based processor
Abstract	<p>There are hundreds of various skin disorders that can affect humans. Millions of individuals worldwide suffer from skin ailments, making accurate detection techniques essential. Time and accuracy constraints are occasionally a problem for traditional diagnostic techniques. If skin disorders are not addressed in a timely manner, they might lead to complications within the body, such as the infection spreading from person to person. "Skin diseases identification through image classification" and prompt investigation of the affected region can aid in prevention.</p> <p>To overcome these limitations, we present a deep learning-based prognostic model for skin conditions. To achieve better classification accuracy, we employ a range of machine learning methods in conjunction with feature selection and ensemble learning techniques. We employ a user-friendly, web-based framework created with the Python programming language Flask. Experts can instantly detect skin health issues by uploading images to this portal with ease. We achieve a high accuracy rate of 95% by combining MobileNet classifiers with Convolutional Neural Networks (CNN) to produce precise predictions.</p> <p>Keywords: Skin diseases, Deep learning, Disease prediction, Convolutional Neural Network (CNN), MobileNet.</p>