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## **Skin Disease Detection System**

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Abstract: Skin diseases are a widespread public health concern, and traditional diagnostic methods often prove inadequate due to their reliance on manual visual inspection and physician experience, leading to subjectivity and potential errors. This is further com- pounded by limited access to dermatological expertise in resource- constrained settings. Current practices struggle with differentiating between visually similar conditions, managing large volumes of data, and serving diverse populations. The lack of transparency in these methods can also create mistrust among users. Advancements in machine learning and deep learning, however, offer promising solutions. Techniques like CNNs and hybrid models enhance the accuracy and reliability of skin disease detection. Specialized frameworks for specific diseases, federated learning for privacy and scalability, and interdisciplinary approaches further improve diagnostic capabilities. The Skin Disease Detection System integrates these advancements, providing a transparent, accurate, and accessible platform that overcomes the limitations of traditional methods and addresses the needs of modern healthcare. This user- centric system empowers individuals to take control of their skin health through informed decision-making.

Keywords: skin, skin diseases, machine learning, cnn, diagnostic models, accuracy, transparency, healthcare



