**AI-Powered Dermatological Analysis: Real-Time Facial & Affected-Area**

**Scanning for Precision Skincare**

**ABSTRACT**

Artificial intelligence (AI) is transforming dermatological care by integrating pharmacy, bioinformatics, and health information technology (HIT) to enable real-time, accurate skin condition analysis. This study explores AI-powered image processing and deep learning models to detect acne, psoriasis, eczema, infections, and malignancies with high precision. By leveraging bioinformatics databases and pharmaceutical expertise, the system recommends personalized pharmacological and herbal treatments.

AI-driven computer vision evaluates lesion characteristics, monitors treatment progress, and predicts disease severity. Blockchain-secured electronic health records (EHRs) and cloud-based AI facilitate seamless, secure collaboration among dermatologists, pharmacists, and healthcare providers. Additionally, IoT-enabled biosensors track skin hydration, UV exposure, and treatment responses, enhancing proactive skincare interventions.

This research underscores AI’s role in reducing misdiagnosis, improving treatment accuracy, and expanding access to expert dermatological care, especially in remote areas. AI-driven dermatology is poised to revolutionize precision medicine, bridging pharmacy, bioinformatics, and HIT for a smarter, patient-centered healthcare system.

**Keywords:** AI, Dermatological Analysis, Facial Scanning, Bioinformatics, Pharmacy, Health Information Technology, Precision Medicine, Blockchain, IoT.

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