

Title: AI in dermatology: From diseases to aesthetics, image to text

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In recent years, the applications of artificial intelligence (AI) have spread across medical fields, and dermatology is no exception. The present session aims to illustrate the transformative impact of AI in dermatological practices and the expanding scope of its applications from disease diagnosis to aesthetics, moving from image interpretation to text-based information extraction. In disease diagnosis, we shed light on how AI models, specifically deep learning networks, are revolutionizing the identification and classification of skin conditions. From melanoma to psoriasis, AI holds tremendous potential to increase diagnostic accuracy, speed, and accessibility, effectively reducing healthcare disparities and improving patient outcomes. Meanwhile, in the realm of aesthetics, we delve into how AI is reshaping the landscape of cosmetic dermatology. Leveraging AI-powered tools, dermatologists are better able to predict and analyze skin aging patterns and offer personalized cosmetic treatments and skincare recommendations, thereby enhancing patient satisfaction and treatment efficacy. Further, we move into the less-explored yet vital territory of text-based AI applications. By leveraging Large Language Models (LLM), we can extract valuable information from clinical notes, patient reviews, and other textual data, enabling a better understanding of dermatological conditions, patient experiences, and treatment effects. Through this presentation, we hope to spark a comprehensive discussion on the promising trajectory of AI in dermatology.