IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 12, May 2023

Segmentation and Removal of Hair Follicles in Dermoscopic Images

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Abstract: The incidence rates of both non- melanoma and melanoma skin cancers are quickly increasing, which indicates that skin cancer is evolving into a major health concern. The ability of automated classification and diagnostic systems can have reduced performance because of the hairs and their shadows on the skin which may hide very important information about the lesion during the time of diagnosis. In this report, we present a technique based on CNN for the task of removing the hair in dermoscopic images. Here, the design of the proposed model employs CNN for the detecting and restoring the hair's pixels from the images. Datasets containing identical images with and without hair are presently unavailable, making it impossible to evaluate the method numerically. such hairless pictures with artificially stimulated hairs is taken from publicly known datasets.

Keywords: Melanoma, deep learning, cnn, skin lession

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International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 12, May 2023

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