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A Convolutional Deep Neural Network Approach for Skin Cancer Detection Using Skin Lesion Images

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Abstract : Malignant melanoma, known simply as melanoma, is a type of skin cancer that appears as a mole on the skin. It is critical to detect this cancer at an early stage because it can spread across the body and may lead to the patient's death. When detected early, melanoma is curable. In this paper, we propose a deep learning model (convolutional neural networks) in order to automatically classify skin lesion images as malignant or benign. Images underwent certain pre-processing steps to diminish the effect of the normal skin region on the model. The result of the proposed model showed a significant improvement over previous work, achieving an accuracy of 97%.

Keywords : deep learning, skin cancer, image processing, melanoma
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