PRE-PROCESSING OF AUTOMATIC SKIN CANCER DETECTION SYSTEM: COMPARATIVE STUDY

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Abstract- Skin cancer is increasing and effect many people in different part of the world. Malignant melanoma as the deadliest type of skin cancer can be treated successfully if it detected early. Automatic detection is one of the most challenging research areas that can be used for early detection of such vital cancer. Over the last few years, many automatic diagnosis systems been suggested by different researchers targeting increasing of the diagnosis accuracy. This paper presents a quick review on the design of whole system and focus in preprocessing step of the automatic system. Preprocessing as the basis of automation system plays a vital role for accurate detection. This paper implements three techniques of contrast enhancement in the framework of three methodologies to find out the most effective one for further processing. The quality of resulted images in each methodology has been found based on testing the skin cancer images database using three image quality measurements.

Index terms*:* Preprocessing, Skin cancer, Detection, Automatic Systems, Image Processing