

## **302. DETECTION OF MALIGNANT SKIN CANCER USING GENETIC ALGORITHM APPROACH**

JEYANTHI KAMALAKKANNAN

PG SCHOLAR

JERUSALEM COLLEGE OF ENGINEERING

jayan.1992@yahoo.com

Skin cancer incidences rates have been increasing for past three decades. The most important risk factor for skin cancer is unprotected exposure to UV radiation. Since, early diagnosis of malignant melanoma increases the chances for cure significantly. But, Biopsy method of detection is painful. We have proposed an non-invasive system for detection of skincancer in early stage. This paper proposes on method for early detection of four different types of skin cancers namely Melanoma, Basal cell carcinoma, Actinic Keratosis and Squamous cell carcinoma using Genetic Algorithm approach. The skin images on normal and abnormal are obtained from skin cancer database. The skin lesion from the database are segmented and ROI is obtained. From the Segmented image, the texture feature are extracted by using GLCM (Gray Level Co-occurrence Matrix) algorithm. From the extracted features, the optimized features are selected by using feature selection method Genetic Algorithm and given to the Classifier Support Vector Machine.

Keywords— Region of Interest, Gray Level Cooccurrence Matrix, Genetic Algorithm, texture features, Support Vector Machine

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