

# **SKIN CANCER IDENTIFICATION**

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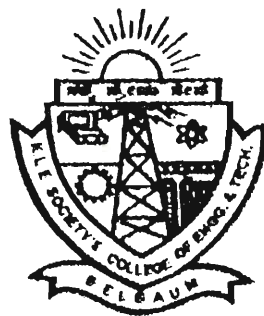
*A Project Report  
submitted in partial fulfillment of the requirements  
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**Submitted by**

**Sivadas Neelima  
Pragati Gaidole**

**Uma Birje  
Rahul Patil**

**Under The Guidance of  
Prof. U. U. Deshpande**



***Department of Biomedical Engineering***

**K.L.E SOCIETY'S  
COLLEGE OF ENGINEERING AND TECHNOLOGY  
UDYAMBAG, BELGAUM – 590 008**

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM  
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## ABSTRACT

Skin cancer is a disease in which skin cells lose the ability to divide and grow normally.

When abnormal cells originate in the skin, the mass is called a skin tumor. Melanoma is a malignant tumor of melanocytes. Malignant melanoma is named after the cell from which it presumably arises, the melanocyte. Melanocytes are the skin cells, which produce the dark protective pigment called melanin, a natural sunscreen. Melanoma cells usually continue to produce melanin, which accounts for the cancers. Early detection of melanoma is the most important factor affecting the survival of the patient.

. Early diagnosis and surgical excision is the most effective treatment of melanoma. Well-trained dermatologists reach a high level of diagnostic accuracy but their performance is increased by using computer aided numerical imaging tools.

The first step towards producing such a diagnosis system is the automated and accurate boundary detection of skin lesion. Therefore, this project introduces a new, simple, and very fast algorithm that has the ability to detect effectively and automatically the border of potential melanoma.

This project focuses the use of image processing algorithms in order to illustrate the use of MATLAB in the calculation of the ABCD Total Dermatoscopy Score (TDS) for potentially malignant melanomas. A high ABCD score means that a lesion is more likely to be a malignant melanoma.