# PROPOSAL

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## Texture Analysis of Skin Cancer Image

This project aims to develop an analise that will identify different patterns in skin lesions applying texture analysis techniques of image processing in images of skin. This project intend show how to apply image processing in medical imaging field.

Below we have examples of input images. Our system will receive images with skin lesions and will analise texture in order to identify patterns that differentiate malign and benign lesions.

The images used in this project are obtained from SIIM-ISIC Melanoma Classification on Kaggle Platform. [https://www.kaggle.com/c/siim-isic-melanoma-classification]

### Main objective of the project

The goal of this project is identify texture patterns that we can use to differentiate benign and malign skin lesions.

### Input images description

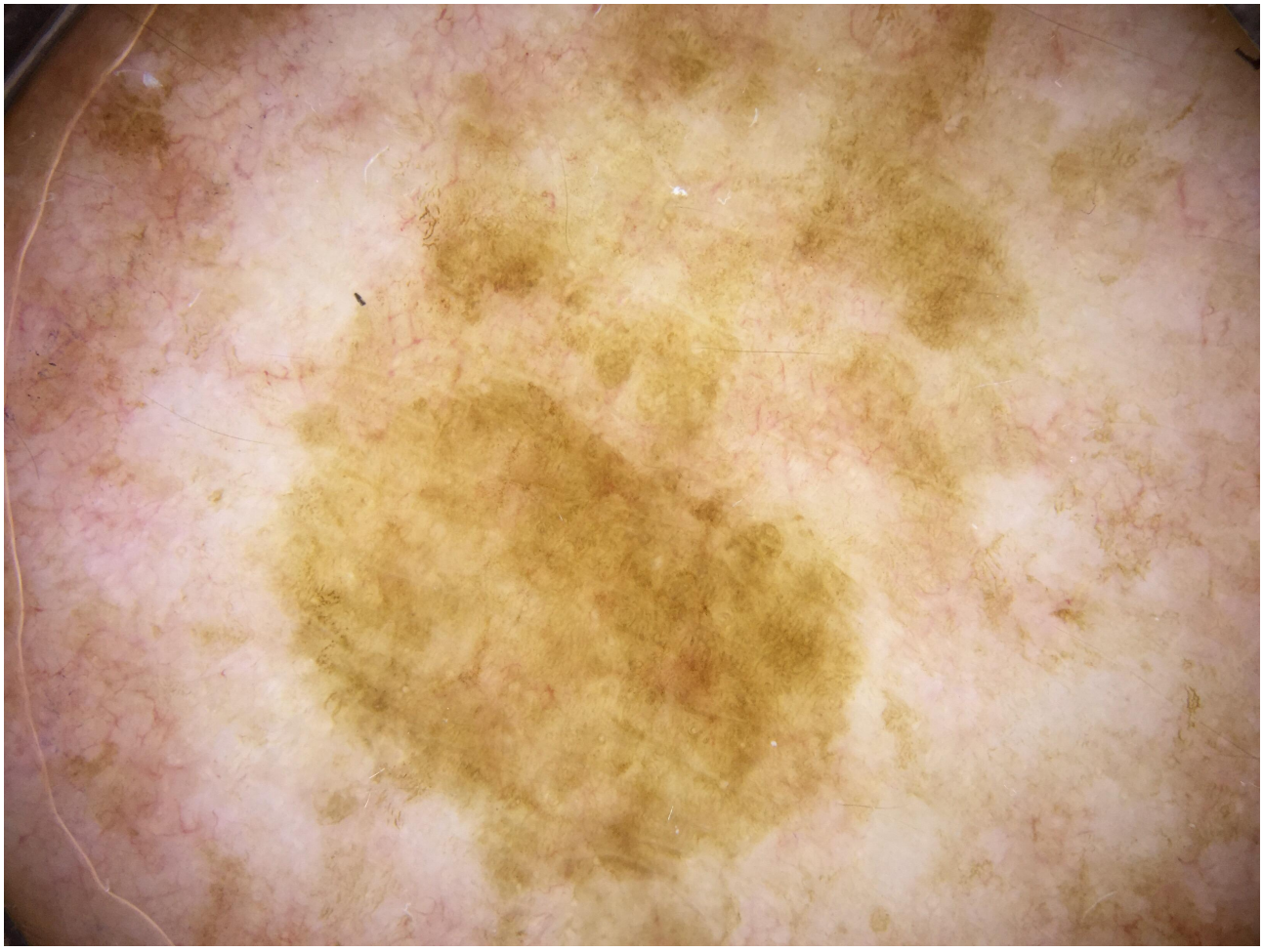
We will analyze 6 images from 3 different peoples.
Each person had 2 images, 1 malign and other benign.
The images are from de same part of the body, malign and benign, in order to avoid different patterns due to difference of body part.
The image are in jpg format and have different size

**Steps to reach the goal**

The first step will be resize all the images to the same size in order to avoid differences due to the size of the image
We will analyze the image using texture analyses techniques, like Local Binary Patterns and distance between malign and benign images.
We will analyze the imagens with colors and grayscale as well as different color system, like HSV.

**Examples of images**

Pessoa 1 - Malign



Pessoa 1 - Benign