Skin Cancer Detection

Domain: Healthcare

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Problem Statement:

Cancer is a deadly disease. Proper treatment at early stage can save lives of people. Dr. Path Labs wants to build a system, which can help detect skin cancer in a patient by detecting skin cancer pictures of patients. You have two datasets: train & test The dataset contains images of benign skin moles and malignant skin moles. The images have all been resized to low resolution (224x224x3) RGB. Your work is to study the data and create an object detection & classification model that can predict the mole type of the image as benign or malignant.

Input Dataset:

The train & test datasets consist of 1800 images of benign mole & 1500 images of malignant mole.

Task to perform:

Task1: Data load Load the images & create set of images & labels.

Task2: One Hot Encoding Converting categorical variable to numerical.

Task3: Normalize the data Normalize all Values of the pictures by dividing all the RGB values by 255.

Task4: Build Model Build CNN model.
Task5: Fit the model Model is fitted on train dataset.

Task6: Cross-Validate the model To find the best fit parameters.

Task7: Model Evaluation Evaluate model on test dataset.