

Informatics Institute of Technology

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**Semi-Automated Jaundice Predictor using Image
Processing**

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Abstract

Now a days identifying skin diseases clinically is not an easy task. Jaundice is one of them. Jaundice which is also known as icterus is yellowish discolouration of skin and mucous membranes due to accumulation of bile pigments (bilirubin) in blood and deposition in body tissues. Skin and white part of the eyes (sclera) gets yellowish appearance due to a yellow pigment. With clinical exposure doctors usually diagnose jaundice by identifying the yellowish tinge of palms and sclera in general examination if it is present. Identifying the discoloration clinically is differed according to person's level of vision. And sometimes it is difficult to clearly identify the yellowing in the dark skins especially in south Asian countries. When strong Jaundice is presented, babies or adults should be subject to clinical exam like "serum bilirubin" which can cause traumas in patients, And also there are some invasive tests has to be done by the doctors to identify the cause of the jaundice.

Many researchers have been developed some different algorithms to detect jaundice. Some are still using an invasive methods at least once for the beginning and some are not directly check the skin and sclera colours. In this project, new algorithmic approach is introduced to identify the jaundice symptoms using images of the patient and analyzing the image. The new approach is mainly based on the patients in south Asian countries.

Keywords: Jaundice, clinical exposure, dark skins, Non-invasive