**AI BASED LOCALIZATION AND CLASSIFICATION OF SKIN ERYTHEMA**

**TEAM ID:** PNT2022TMID52767

**TEAM.NO:**4

**MEMBERS:**

1904020-KIRUTHIKA.A.

1904021-KIRUTHIKA.P.S.

1904033-POOMATHI.D.

1904036-PRITHINGA DEVI.U.

**ABSTRACT**

Computer-aided diagnosis systems (CAD) have been extensively used in various medical fields such as mammography and breast cancer detection. These systems traditionally relied on manual feature engineering based on domain knowledge. But in recent days, newer approaches are employing machine learning techniques to discover the untapped symptoms of several diseases and infections. Our main objective here is to find a novel approach to aid in finding the early symptoms of skin erythema using computer vision. Skin erythema is a type of skin rash caused by injured or inflamed blood capillaries which usually occurs in response to a drug-disease or infection. The rash can appear on all parts of the body in different patterns and variations of colour such as red, purple, or brown. Our aim here is to offer assistance in the early detection of skin erythema by developing a neural network model to classify and localize the rashes on the skin. The identification of skin disease from the images captured by a camera is provided to an image processing model. Pre-processing and feature extraction are performed in the image-processing stage. In the image processing model, colour, texture, and share of the features are extracted and analyzed. The features are then fed to a classifier model. This classifier model predicts the type and severity of the skin disease.