

ABSTRACT

Early detection of skin cancer can significantly increase patient recovery rates through faster and more accurate diagnosis. This study aims to a skin cancer classification model using the Convolutional Neural Network (CNN) method with the MobileNetV2 architecture. The dataset used is HAM10000, which consists of 3.504 dermoscopic images classified into two main categories: *benign* and *malignant*. The data was split into two parts, with 70% for training and 30% for validation. The research includes several stages: data collection, data preprocessing (cropping, resizing, and normalization), model training, and performance evaluation. The evaluation results showed the model achieved a maximum validation accuracy of 91,03%. The confusion matrix for the test data demonstrated strong model performance, with high classification accuracy for both categories. From this study the result obtained that the MobileNetV2 architecture can effectively classify skin cancer with high accuracy

Keywords : Convolutional Neural Network, MobileNetV2, HAM10000, skin cancer classification, deep learning.