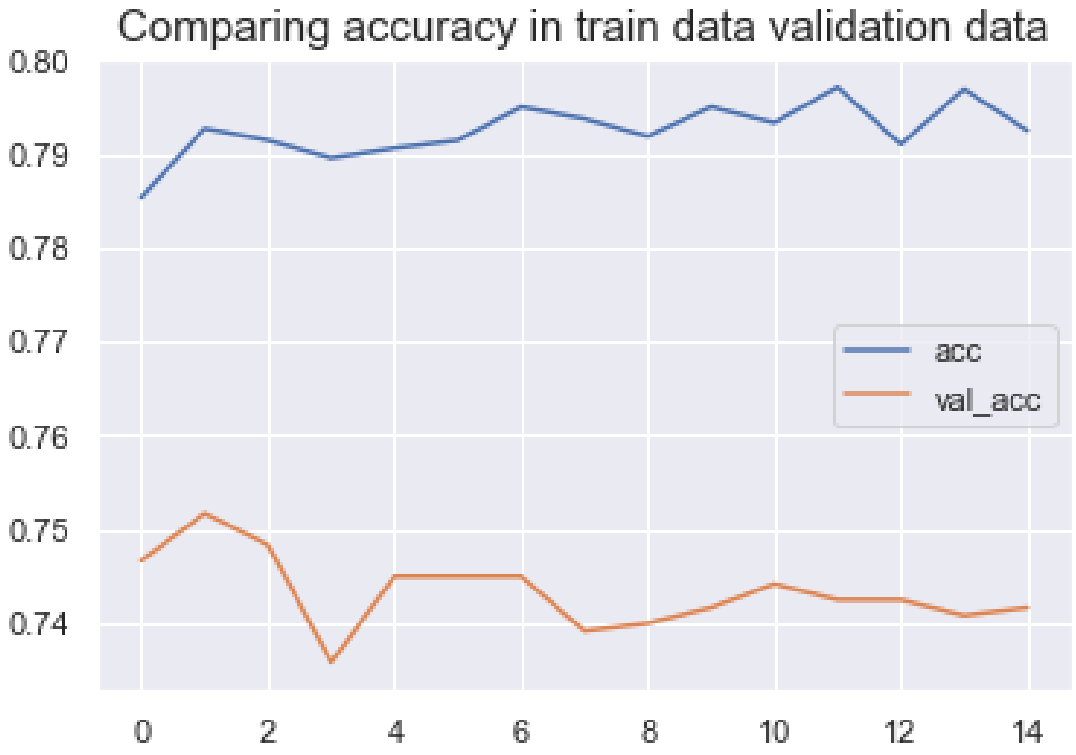
Structured Abstract

Skin cancer is an alarming disease for mankind. The necessity of early diagnosis of skin cancer has been increased because of the rapid growth rate of Melanoma skin cancer, its high treatment costs, and its death rate. The major objective is to develop a model that can analyse skin images and identify the type of skin cancer that is presently based on the image that has been processed. This paper proposed an artificial skin cancer detection system using image processing and a machine learning method. The features of the affected skin cells are extracted after the segmentation of the Dermatoscopy images using the feature extraction technique. A deep learning-based method convolutional neural network classifier is used for the stratification of the extracted features. An accuracy of 78% on validation data and the training accuracy of 74% have been achieved after analysing the data present on Kaggle, whereas 77% accuracy is obtained for Test data. In this research, the accuracy was improved by changing the epoch and batch size of the data. Due to lack of computational power the batch size and epoch was kept minimum.

Plot for comparing accuracy of train and validation.



Confusion Matrix