Image Classification with Convolutional Neural Network

Ya Min Htwe[1], Nu Nu Swe[2] and Thu Zar Yin[3]

Abstract

Neural network is widely used in many image classifications issues. With the rapid development of high-performance computing devices and parallel computing devices, convolutional neural network also draws more increasing attention from many researchers in this area. In this work, the concept of a Deep Learning algorithms namely Convolutional Neural Network (CNN) is applied in image classification. The input image size is converted to the size of network layer one. All data was trained with ResNet and AlexNet networks. The data was shown by means of a confusion matrix. Moreover, the output of the image was shown by means of a character form. All processing was performed in MatLab.

Key words: Convolutional Neural Network, MatLab, Image Datasets

1. Assistant Lecturer, Department of Physics, Yangon University of Education
2. Associate Professor, Dr., Department of Physics, Yangon University of Education
3. Associate Professor, Dr., Department of Physics, Yangon University of Education