Paper Details

Paper Title : Deep Learning Predictive Model for Colon Cancer Patient using CNN-based Classification.

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Why they have conducted this research?

In this research, the authors analyzed image data of colon cells to identify colon cancer. As we know, cancer is an illness in which abnormal cells develop within the human body and spread throughout the organs. They conducted the research to make the identification procedure of colon cancer easy, quick and feasible utilizing both cancer cells and healthy cells that will help the medical researchers in hospitals or clinics to handle colon cancer cases in future.

Proposed System

In this paper they are using Max Pooling, average polling and MobilenetV2.They are collect data from Kaggle . When they have collected all data their task is Data preprocessing so they are used data augmented technique using some variable like rotation range is 20,zoom range 0.15 ,weight and height range is 0.2, shear range is 0.15 and they are applied Horizontal and vertical flip is true . then they are resize their image dataset by 224*224 pixels. Then they are converted image into numpy array for apply CNN model. They are used MobilenetV2 for training. They are two pooling layer one by one at first used max pooling layer then used average pooling layer. There used activation function is ReLU for hidden layer and they are used two Dense layer for output layer . First dense layer used ReLU activation and second Dense layer is used Sigmoid Function.

Result Analysis

In this research paper ,their max pooling layer training accuracy is 94.44%,training data loss is 0.1634 and Test accuracy is 97.49% average pooling layer training accuracy is 90.73% ,training data loss is 0.2254 and test accuracy is 95.48% .MobilenetV2 provides accuracy is 99.67% and data loss rate is 1.46 ,Test accuracy is 99.6%.