

BACTERIAL IMAGE CLASSIFICATION

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ABSTRACT

Bacteria classification is an essential task in medical field, for the diagnosis and treatment of various diseases . Manual classification of bacteria is a time consuming and challenging task which requires huge human efforts. An automizing process for bacteria recognition becomes attractive to reduce the analyzing time and increase the accuracy of diagnostic process. This project focuses on possibility to use image classification and deep learning method for classify genera of bacteria. Deep Neural Network (DNN) is one such promising technology which has been widely used for image classification. One of the variant of DNN is Convolutional Neural Network (CNN) and LSTM which is an efficient technique for classification problems. This project focus on classifying bacterial images using ResNet-34 and ResNet-50 for classification of microscopic bacterial. DIBas(Digital Bacterial Colonies Segmentation) dataset are using in this project.

