

OCULAR DISEASE RECOGNITION IN DEEP LEARNING

ABSTRACT :

There has always been a problem for clinicians to identify eye diseases using fundus images early enough. Ocular disease diagnosis by hand is an expensive task, prone to errors, and difficult. Automated computer systems for detecting ocular diseases are needed to identify different eye illnesses utilizing fundus pictures. This project proposes a deep learning-based technique for focussed ocular detection. Such a system is now trouble-free because of deep learning algorithms that have enhanced picture categorization capabilities. For this, we classified the Ocular Disease Intelligent Recognition (ODIR) dataset, which includes 6000 photos of eight distinct fundus classes, using VGG-19, and ResNet50 image classification algorithms. Different ocular problems are characterized by these classifications. However, the dataset for these classes is somewhat erratic. This project recommended using the same amount of photos for both categories and creating a binary classification challenge out of this multiclass classification problem to address this difficulty. This project also uses the latest vision transformer method. The models are trained with actual data as well as with images after applying (LBP) Local Binary Pattern on the image.

GUIDE SIGNATURE

CO-ORDINATOR SIGNATURE