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Multiple Human Eye Disease Detection Using Deep Learning

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Abstract: The detection of multiple human eye diseases is crucial for early diagnosis and treatment, preventing severe vision loss. Traditional diagnostic methods rely on expert ophthalmologists, which can be time-consuming and prone to human error. This project propose a deep learning-based approach for the automatic detection and classification of multiple eye diseases, including glaucoma, diabetic retinopathy, cataracts. A convolutional neural network (CNN) model is trained on a large dataset of retinal images to extract features and classify diseases with high accuracy. The model is optimized using data augmentation, transfer learning, and hyperparameter tuning to improve performance. This project highlights the potential of deep learning in aiding ophthalmologists with faster and more accurate diagnoses, ultimately improving patient outcomes

Keywords: eye diseases





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