

Multi-Label Classification of Eye Disease Using Deep Learning

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Abstract

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Abstract:

Early detection of retinal diseases is necessary to prevent vision loss but the detection faces limitations of poor generalization, inconsistency in datasets, and lack of clinical interpretability. To mitigate these challenges, the study designed a comprehensive framework to create a generalized, accurate and clinically reliable multi-label ocular disease classifier. The proposed framework involved creation of a heterogenous dataset by combining two publicly available datasets and then refining the dataset to 6 classes according to the frequency of classes to mitigate the class imbalance. 11 state-of-the-art models were evaluated where Swin-Tiny

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