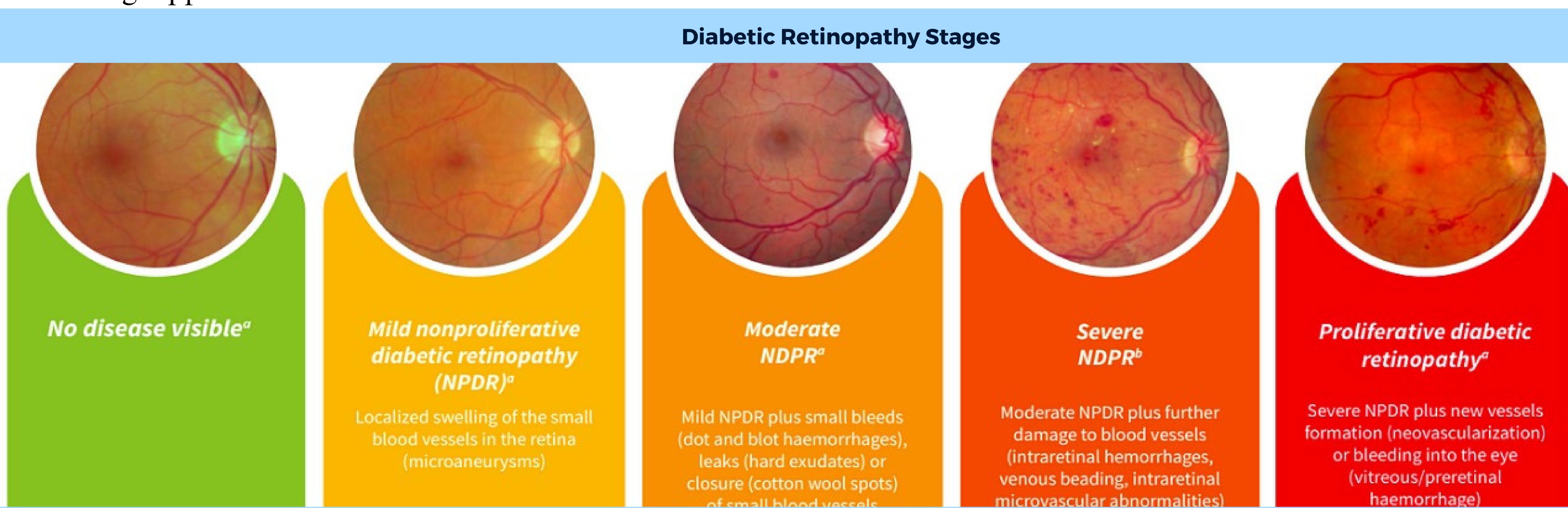


DIABETIC RETINOPATHY BLINDNESS DETECTION -ARTIFICIAL INTELLIGENCE



Definition

Diabetic retinopathy (DR) is one of the leading causes of preventable blindness globally. Performing retinal screening examinations on all Diabetic patients is an unmet need, and there are many undiagnosed and untreated cases of DR. The objective of this study was to develop robust diagnostic technology automate DR screening. We are using Transfer Learning Approach to detect DR



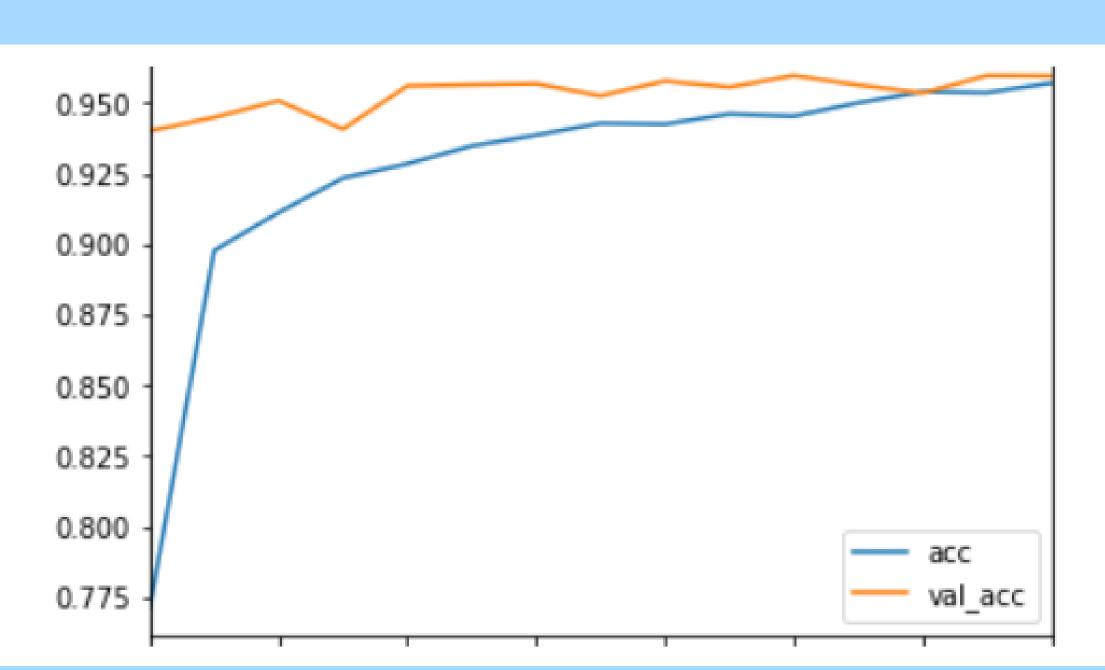
Detection Process

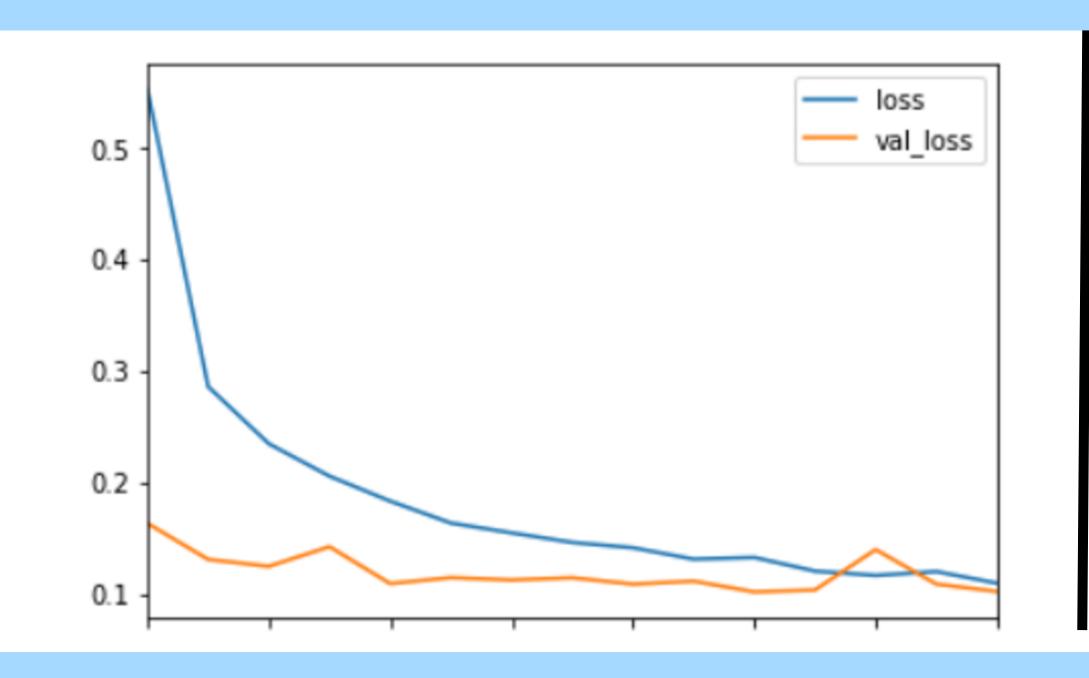
Acquisition Model Evaluation Classification **Train Features** Data on DR **Preprocessing** OUTPUT **Generate DenseNet** and Residual Block Moderate Diseased No DR Severe

Use Cases

- Early Diagnosis and Personalized Treatment
- Improved Accessibility
- Deep Learning In Clinical Trials.
- Automated Retinopathy Screening.
- EHR Integration for Retinal Analysis
- Research and Development.

Model Evaluation





Model Specification

Total Parameters: 7,042,629

Accuracy: 95.34%

Sensitivity: 98.83%

Specificity: 93.82%

Kappa Score: 90.34

Team



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