

VisionAI — Doctor Report



Generated: 2025-11-07 07:08:27

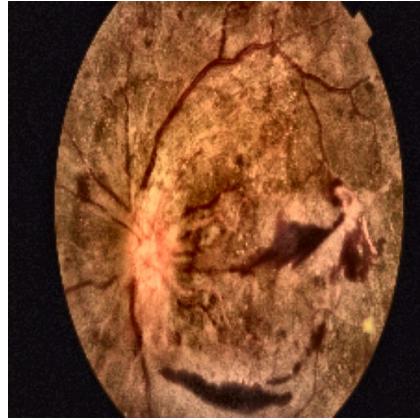
Patient Metadata

Patient ID	Patient_328
Full Name	Jenifer Rao
Age	61
Gender	Male
BP	142/72
Systolic	142.0
Diastolic	72.0
Glucose Level	110.0
BMI	32.7
Smoking	Yes
Duration of Diabetes (years)	18.0
Hypertension	No
Family History	Yes
Phone	000-000-0000
Address	Remote

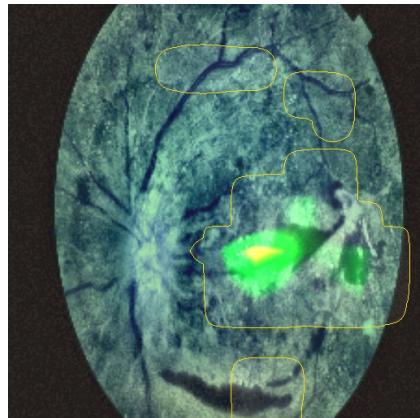
Image Visualizations



ORIGINAL



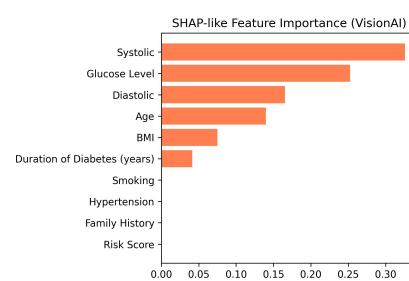
PREPROCESSED



GRADCAM



LIME



SHAP

Lesion Breakdown

Feature	Percentage (%)
Total lesion coverage	26.51
Exudates	0.42
Hemorrhages	1.44
Cotton wool spots	5.37
Microaneurysms	0.0

Model Confidence: 96.0%

Composite Risk Score: 52.59 (0-100)

<ul style="list-style-type: none"> Prediction: PDR • Model confidence: 96.0% • Composite risk score: 52.59 (0-100).
<ul style="list-style-type: none"> Explainability: heatmaps and perturbation maps localize attention to macular and temporal quadrants; LIME/SHAP indicate strong tabular influence from glucose and systolic BP.
<ul style="list-style-type: none"> Lesion quantification supplied (see Lesion Breakdown). These estimates assist in triage decisions; high hemorrhagic burden suggests expedited referral.
<ul style="list-style-type: none"> Clinical recommendations: consider OCT & fluorescein angiography when macular edema or neovascularisation suspected; optimize glycemic and BP control; smoking cessation counseling.
<ul style="list-style-type: none"> Suggested follow-up: schedule retina clinic within 1–4 weeks depending on severity; photographic monitoring and OCT for macular assessment.

Model Evaluation Metrics

Metric	Value
Accuracy	0.985
F1-score	0.982
AUC/ROC	0.993