

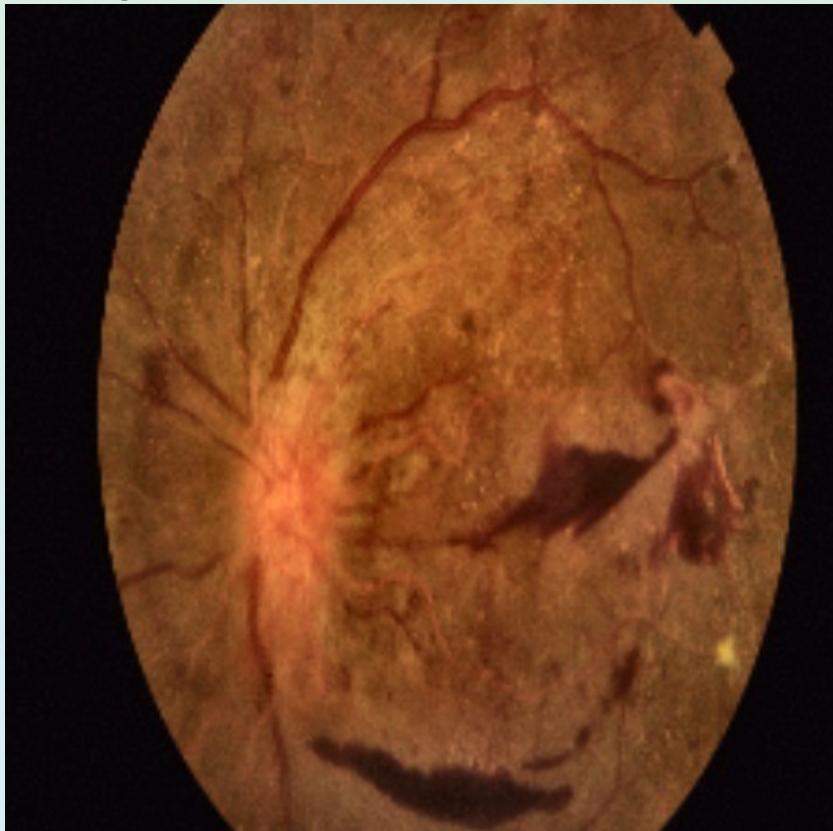


AI-Driven Retinal Screening for Early Detection of Diabetic Retinopathy

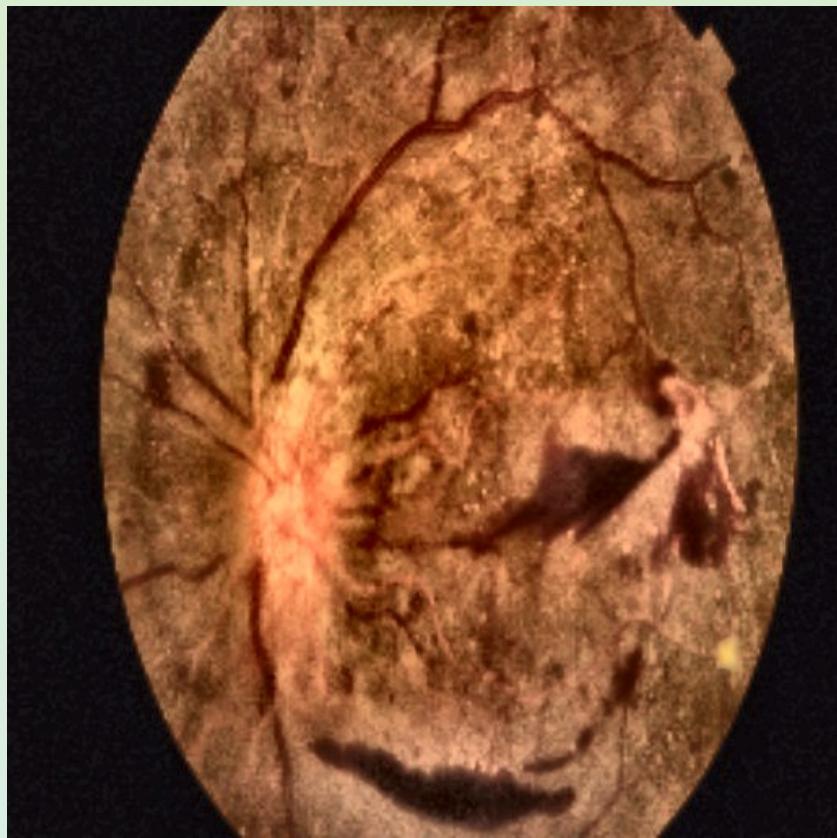
VisionAI Patient Report

| | |
|-----------------|----------------|
| Patient ID | VAI_4803 |
| Name | Sara Fernandes |
| Age | 65 |
| Gender | Male |
| Blood Pressure | 142/72 |
| Glucose Level | 110 mg/dL |
| Predicted Stage | PDR |
| Confidence | 97.0% |

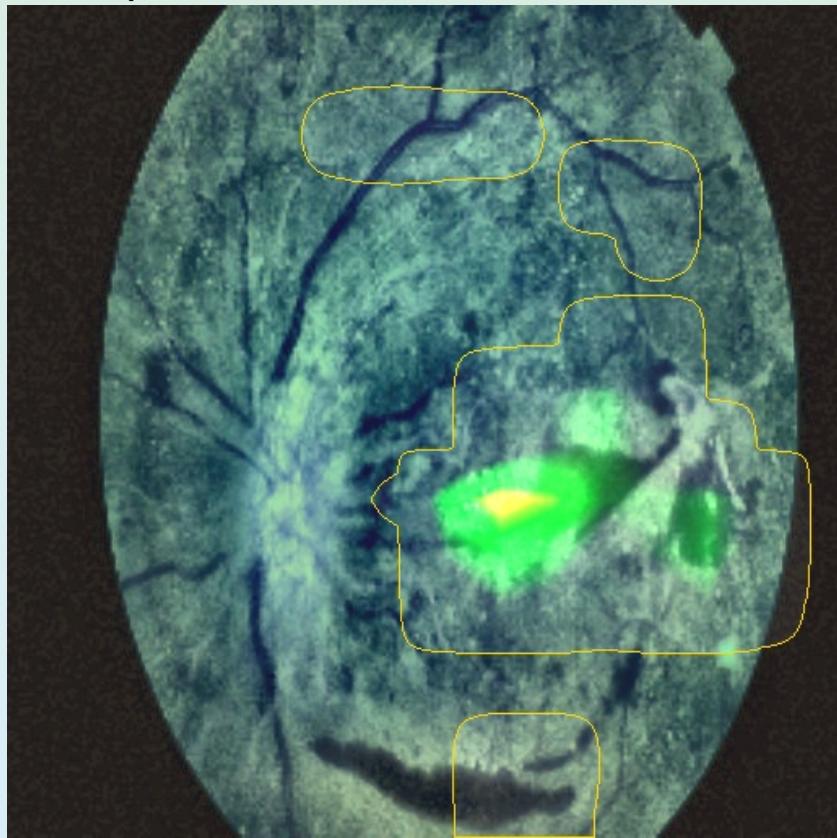
Original Fundus Image



Preprocessed (CLAHE)



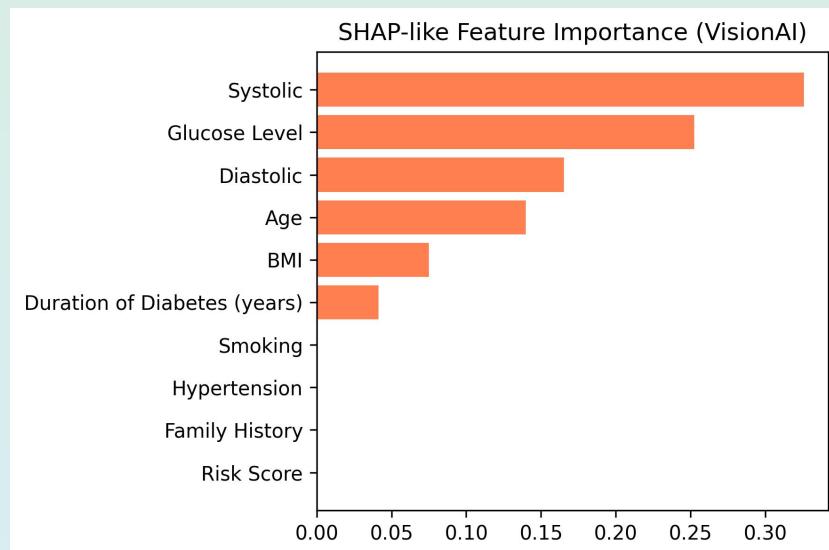
Grad-CAM++ Heatmap



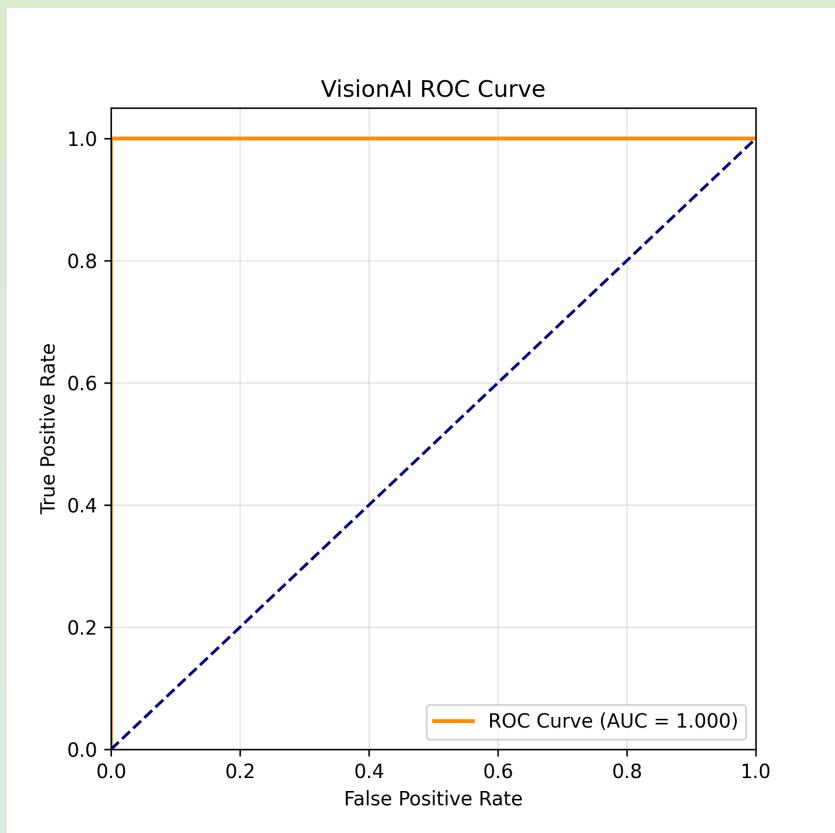
LIME Visualization



SHAP Interpretation



ROC Curve



Your AI Vision Screening Summary

Hello **Sara Fernandes**,
VisionAI detected signs of **PDR** with **97.0%** certainty.

What this means:

These changes may result from small retinal blood vessel damage due to diabetes.

Next Steps:

- Visit an eye specialist for confirmation.
- Maintain blood sugar, BP, and cholesterol.
- Avoid smoking and eat a healthy diet.

Lifestyle Tips:

- Eat leafy greens, fish, and fiber-rich foods.
- Exercise regularly and manage stress.
- Sleep 7–8 hours; avoid alcohol and processed sugar.

Note: This AI report aids screening; consult your ophthalmologist for clinical diagnosis.