Stage: NO_DR

Metadata Snapshot

Name: solomon
Age: 67
Gender: Male
Systolic (mmHg): 189
Diastolic (mmHg): 110
BMI: 30.8
Glucose: 398
HbA1c: 8.9
Cholesterol: 276
Smoking: Yes
Hypertension: Yes
Diabetes Duration: 17
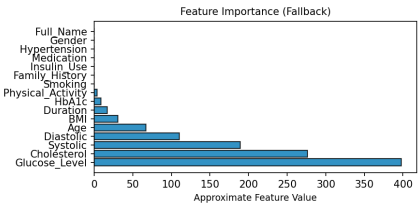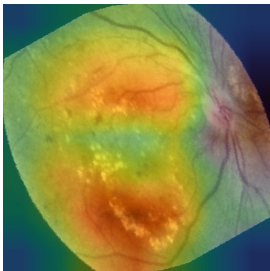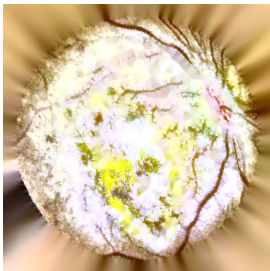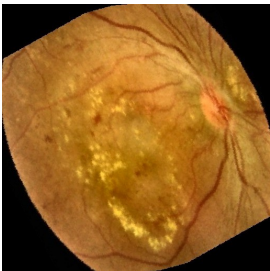
Summary

- Clinical Report — Ophthalmologist
- Patient: Name: solomon, Age: 67, BMI: 30.8
- Predicted stage: NO_DR
- Model confidence: 44.93%

- Risk score: 55.07%
- Findings (automated lesion quantification):
- - Microaneurysms: 10.30%
- - Exudates: 25.00%
- - Hemorrhages: 98.80%
- - Cotton Wool: 25.00%
- - Neovascularization: 25.00%
- - Total Lesion Load: 51.09%
- Clinical interpretation:
- No DR signs detected. Consider routine annual screening unless clinical suspicion exists.
- Model & Explainability:
- - Multi-model fusion: CNN ensemble (EfficientNet, ResNet50, ViT) + metadata models (RF, XGBoost, stacked ensemble).
- - Explainability outputs available: GradCAM++, LIME, SHAP — review heatmaps and overlay masks.
- Performance metrics:
- - Accuracy: 0.947
- - F1-score: 0.938
- - AUC/ROC: 0.971
- Suggested clinical action items:
- 1. Correlate with slit-lamp exam and fundus exam.
- 2. If macular edema suspected, obtain OCT imaging.
- 3. For suspected PDR, arrange urgent retina referral for potential PRP/anti-VEGF.
- 4. Document lesion masks if available for audit.

Lesion Distribution (%)