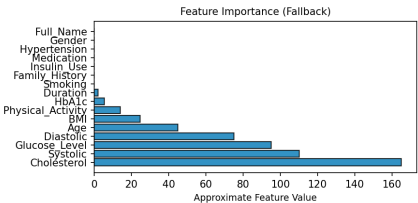
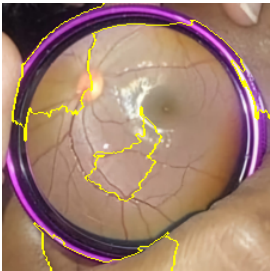
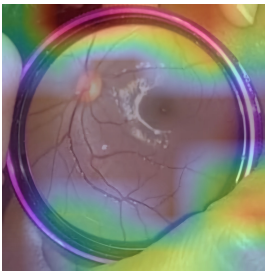
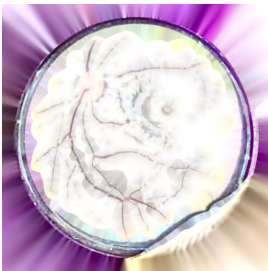


Stage: NO\_DR

Metadata Snapshot

Name: viji
Age: 45
Gender: Female
Systolic (mmHg): 110
Diastolic (mmHg): 75
BMI: 24.6
Glucose: 95
HbA1c: 5.5
Cholesterol: 165
Smoking: No
Hypertension: No
Diabetes Duration: 2



Summary

- Clinical Report — Ophthalmologist
- Patient: Name: viji, Age: 45, BMI: 24.6
- Predicted stage: NO\_DR
- Model confidence: 77.14%

- Risk score: 22.86%
- Findings (automated lesion quantification):
  - - Microaneurysms: 8.40%
  - - Exudates: 3.47%
  - - Hemorrhages: 57.20%
  - - Cotton Wool: 25.00%
  - - Neovascularization: 19.03%
  - - Total Lesion Load: 29.13%
- 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.

