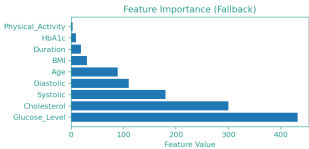
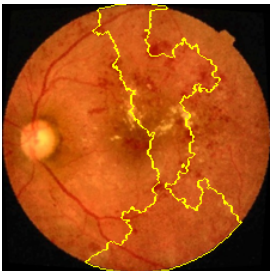
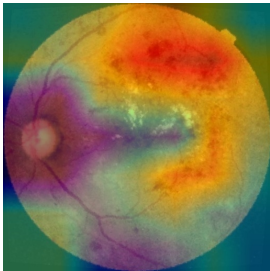
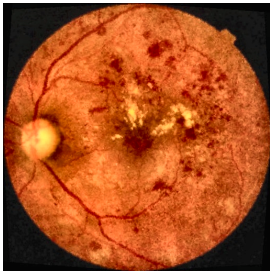


Stage: PDR

Metadata Snapshot

Name: sebastain
Age: 89
Gender: Male
Systolic (mmHg): 180
Diastolic (mmHg): 110
BMI: 30
Glucose: 432
HbA1c: 8.9
Cholesterol: 300
Smoking: Yes
Hypertension: Yes
Diabetes Duration: 19



Summary

- Research Notes
- UID: 52061d9b
- Predicted Stage: Pdr

- **Model Architecture:**
  - CNN ensemble (EfficientNet, ResNet50, ViT) combined with metadata models (Random Forest, XGBoost) via calibrated fusion.
- **Explainability:**
  - Grad-CAM highlights spatial retinal features, LIME validates local pixel importance, and SHAP explains systemic risk contribution.
- **Probability Vectors:**
  - CNN: [0.010821065865457058, 0.012188243679702282, 0.017901958897709846, 0.037009499967098236, 0.9220792651176453]
  - ML: [0.21136369507961952, 0.20268235745827803, 0.19376393050773666, 0.19047474400645248, 0.20171527294791336]
  - Fused: [0.0409024590819239, 0.040762359584823736, 0.044281253377265864, 0.06002928486225855, 0.8140246430937279]
- **Inference Device:** CPU

