Stage: PDR

Metadata Snapshot

■■■■■: sebastain	
■■■■■■: 89	
■■■■: Male	
■■■■■■■■■ (mmHg): 180	
■■■■■■■■■■ (mmHg): 110	
BMI: 30	
■■■■■■■■: 432	
HbA1c: 8.9	
■■■■■■■■■■■: 300	
■■■■■■: Yes	
■■■■■■■■■: Yes	
■■■■■■ ■■■■: 19	
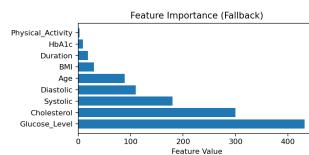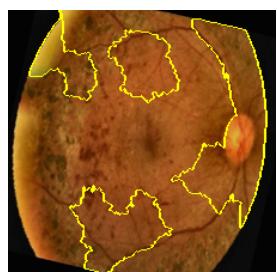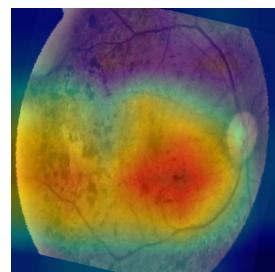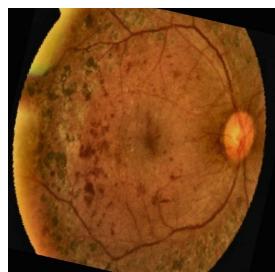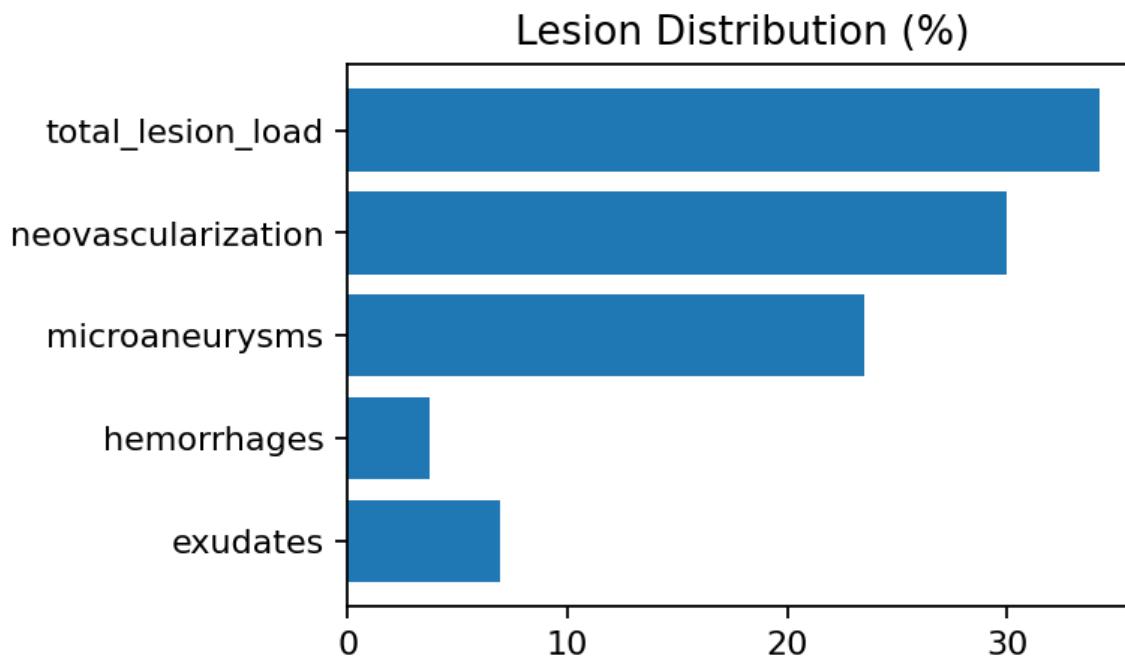
Summary
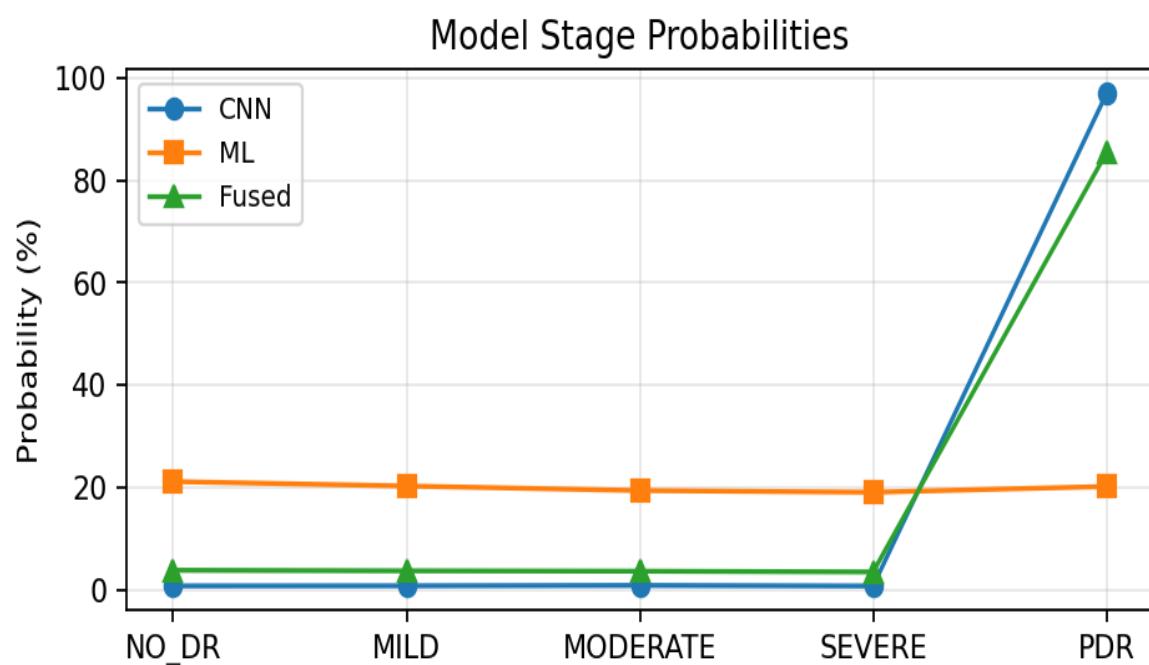
- Research Notes
- UID: 893a90dd
- Predicted Stage: Pdr

- 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: [0.007390813436359167, 0.007619400043040514, 0.008325896225869656, 0.007223432417958975, 0.9694404602050781]

- ML: [0.21136369507961952, 0.20268235745827803, 0.19376393050773666, 0.19047474400645248, 0.20171527294791336]

- Fused: [0.03798674560767015, 0.03687884358234068, 0.036141601296623284, 0.034711129087537575, 0.8542816804258282]
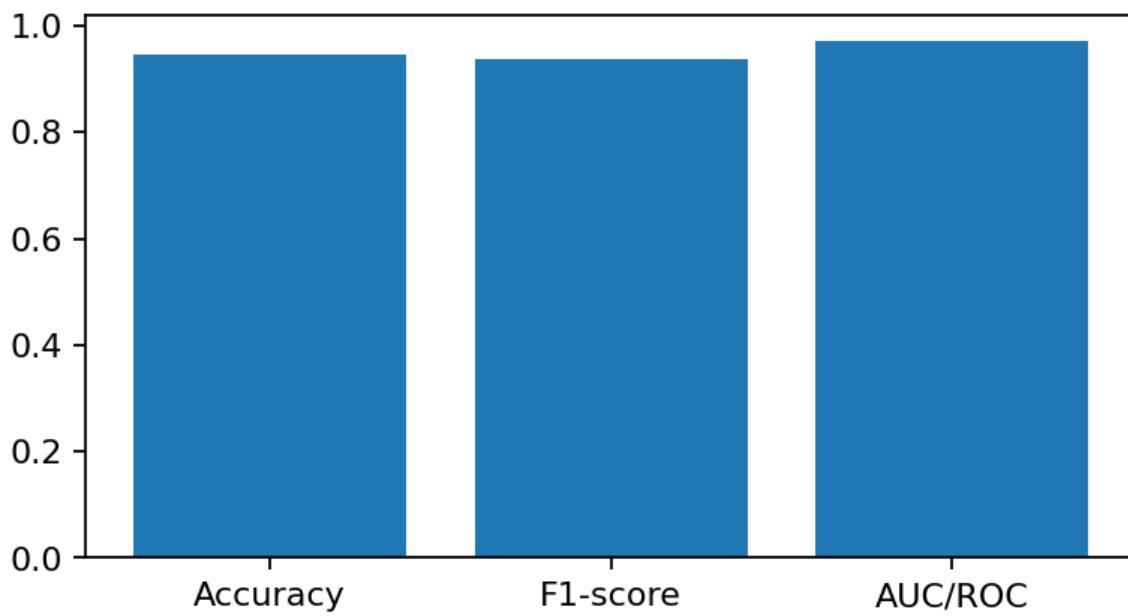
- Inference Device: CPU

Lesion Distribution (%)

Model Stage Probabilities

Model Performance Metrics

Model Accuracy Comparison (%)