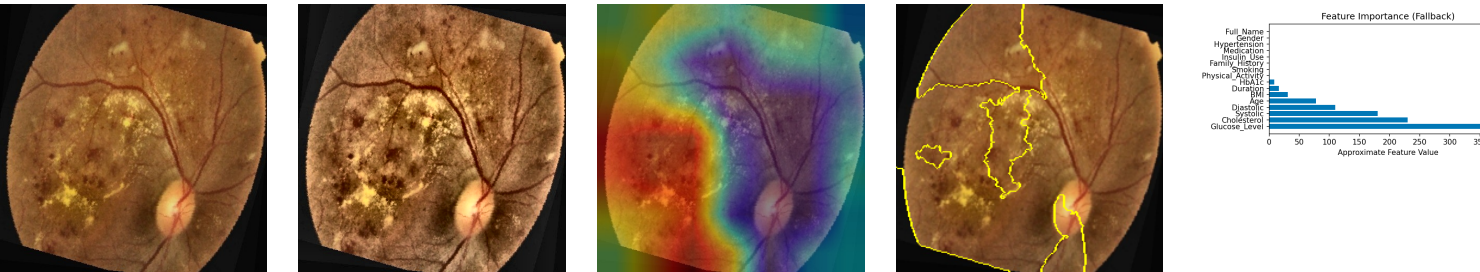


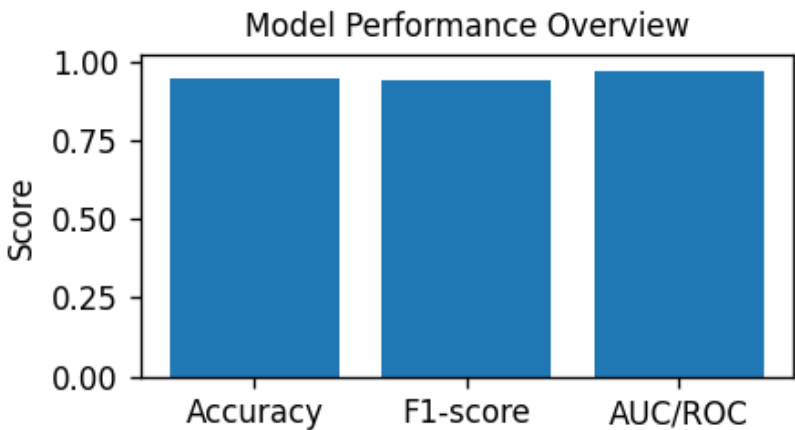
Metadata Snapshot

Name:	solomon
Age:	78
Gender:	Male
Systolic (mmHg):	180
Diastolic (mmHg):	110
BMI:	30.8
Glucose:	376
HbA1c:	8.6
Cholesterol:	230
Smoking:	Yes
Hypertension:	Yes
Diabetes Duration:	16



Research Notes

- VisionAI Research Report
- UID: 61de8a30 Predicted Stage: SEVERE Confidence: 83.85% Risk Score: 95.26%
- Model Stack: • CNN Ensemble: EfficientNet, ResNet50, ViT • Metadata models: Random Forest, XGBoost, Stacked Ensemble • Fusion...
- Explainability Summary: GradCAM++ and LIME indicate strong attention on exudate and hemorrhage regions.
- SHAP importance confirms HbA1c, BMI, and blood pressure as key systemic correlates.
- Performance Metrics: • Accuracy: 0.947 • F1-score: 0.938 • AUC/ROC: 0.971
- Probability Vector (fused model): [0.04739566612858648, 0.03904256866971063, 0.032650389535847264, 0.8384720053460426, 0.0424...
- Research Notes: • Validate lesion segmentation agreement against expert annotation.
- Evaluate multimodal temporal tracking for progressive DR detection.



- F1-score: 0.938
- AUC/ROC: 0.971