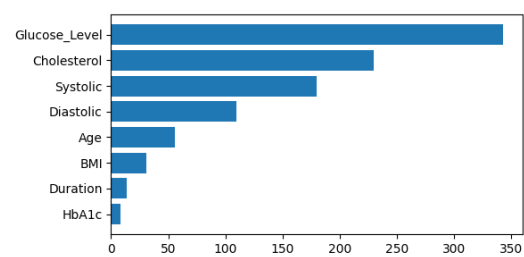


SHAP



Lesion Quantification

Lesion Quantification:

| Feature | Percentage |
|-------------------|------------|
| Exudates | 1.03% |
| Hemorrhages | 7.95% |
| Cotton_wool | 0.00% |
| Lesion_percentage | 8.98% |

Clinical Recommendations

- Urgent ophthalmology referral if severe stage.
- Consider OCT imaging and HbA1c optimization.
- Optimize BP and lipid control.
- Retinal follow-up every 3–6 months based on severity.

Model Evaluation Metrics

Accuracy: 0.947
F1-score: 0.938
AUC/ROC: 0.971