Breast Cancer Prediction Report

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Introduction

This report summarizes the provided input features, the model outputs and performance visualizations. Each model available on the system is evaluated using the same input sample and the corresponding plots (ROC, Confusion Matrix, Precision-Recall curve and Feature Importances where available) are embedded below.

Input features

Feature	Value
radius_mean	17.99
texture_mean	10.38
perimeter_mean	122.8
area_mean	1001.0
smoothness_mean	0.1184
compactness_mean	0.2776
concavity_mean	0.3001
concave points_mean	0.1471
symmetry_mean	0.2419
fractal_dimension_mean	0.07871
radius_se	1.095
texture_se	0.9053
perimeter_se	8.589
area_se	153.4
smoothness_se	0.006399
compactness_se	0.04904
concavity_se	0.05373
concave points_se	0.01587
symmetry_se	0.03003
fractal_dimension_se	0.006193
radius_worst	25.38
texture_worst	17.33
perimeter_worst	184.6
area_worst	2019.0
smoothness_worst	0.1622
compactness_worst	0.6656
concavity_worst	0.7119

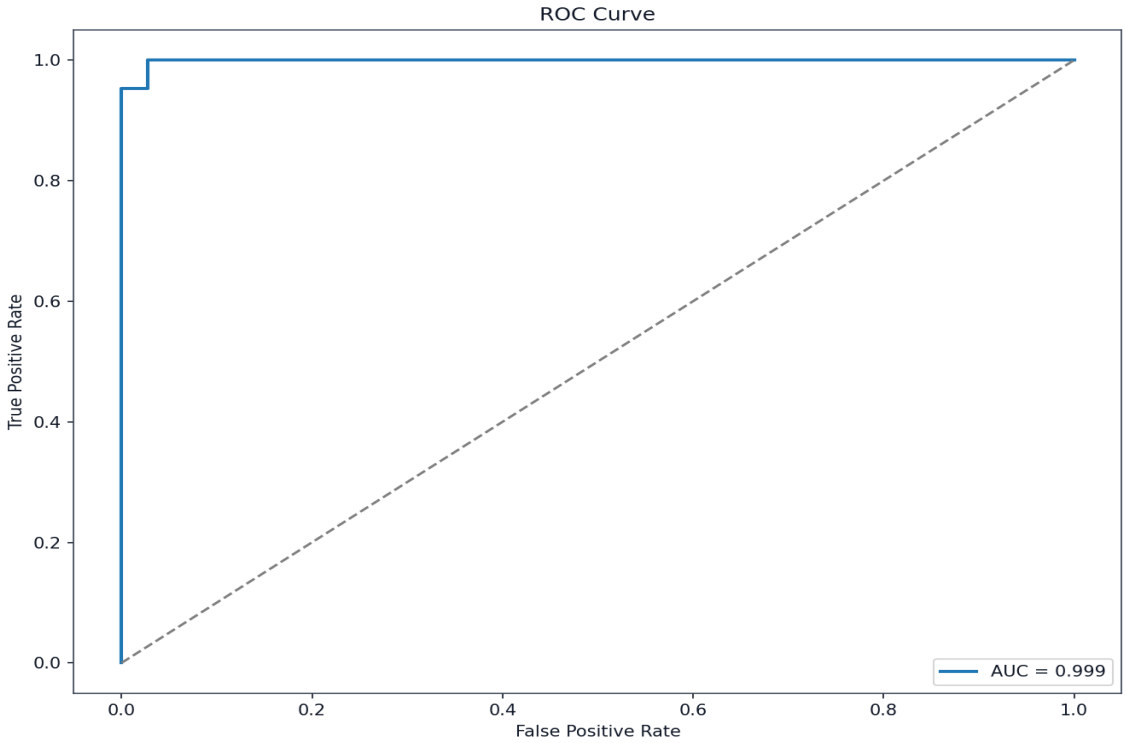
concave points_worst	0.2654
symmetry_worst	0.4601
fractal_dimension_worst	0.1189

Model: sklearn

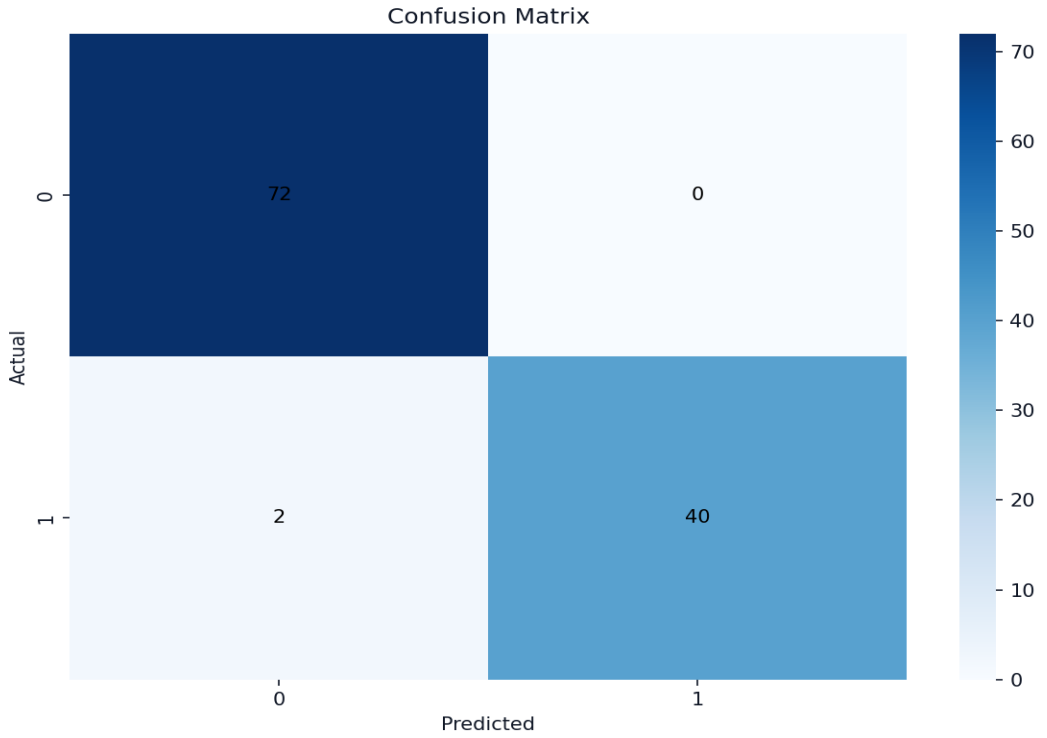
Model description: Scikit-learn based pipeline which includes preprocessing and a trained classifier. It expects the input features to match the trained feature set and outputs a binary prediction and confidence score.

Field	Value
Model	sklearn
Prediction	1
Probability	0.999999999531763

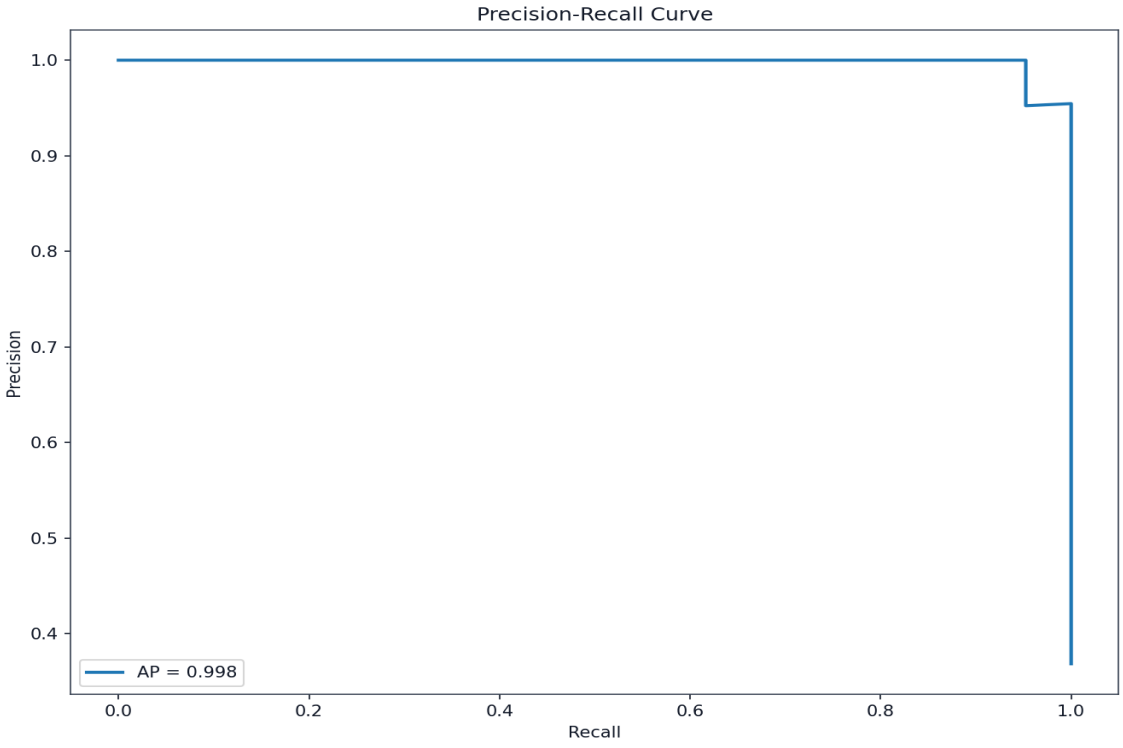
ROC Curve



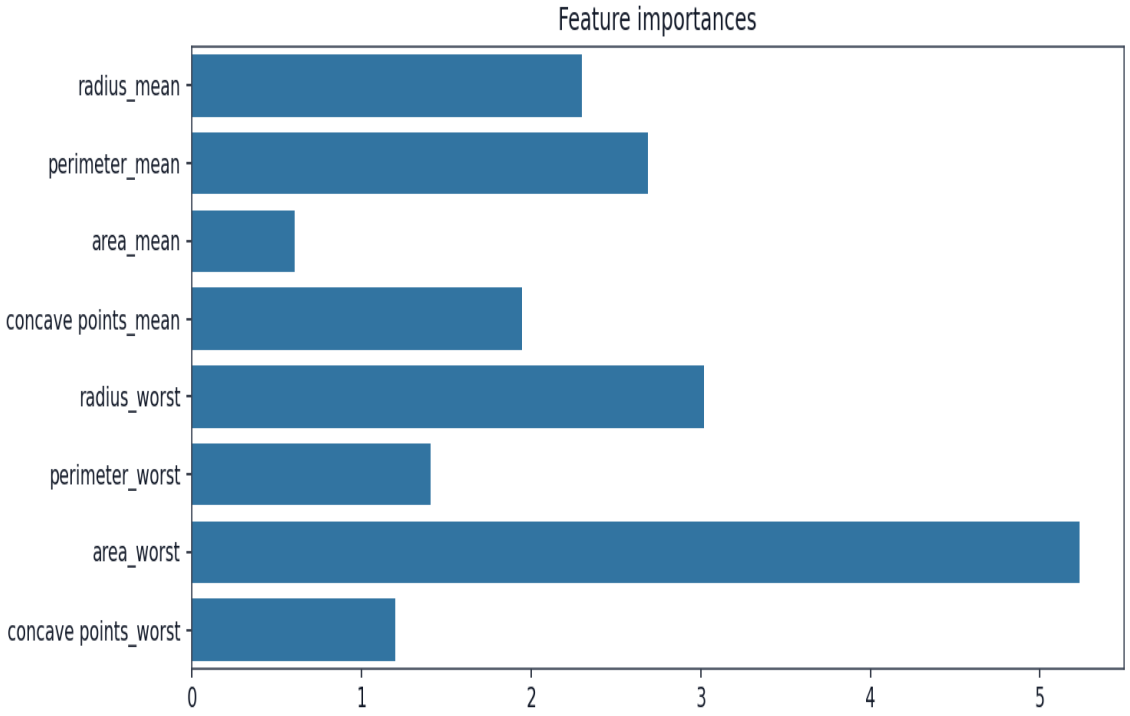
Confusion Matrix



Precision-Recall



Feature Importances

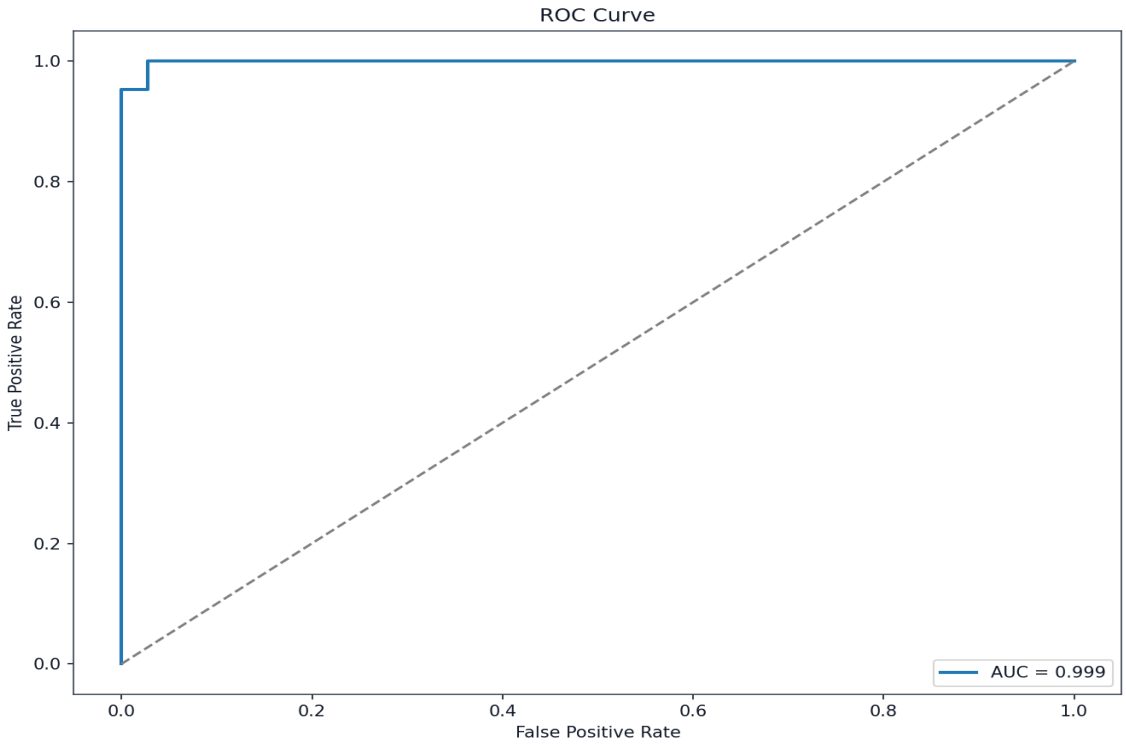


Model: stacking

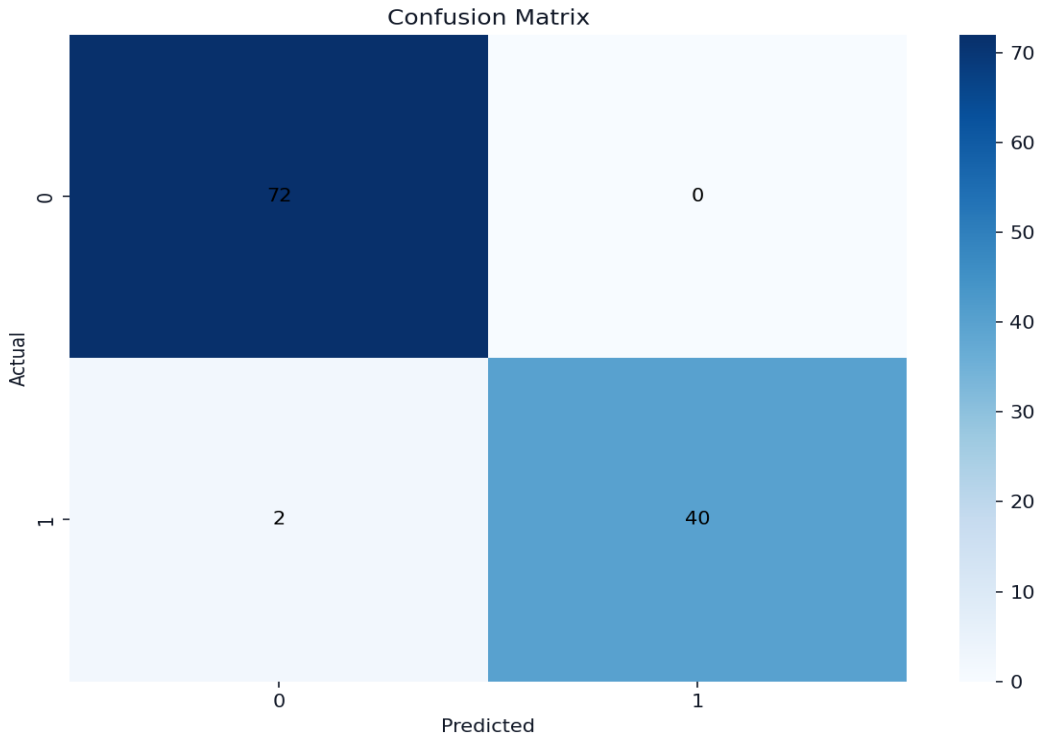
Model description: Stacking ensemble that combines multiple base learners into a meta-classifier to improve predictive performance. Feature importances may not be directly available for the ensemble.

Field	Value
Model	stacking
Prediction	None
Probability	None

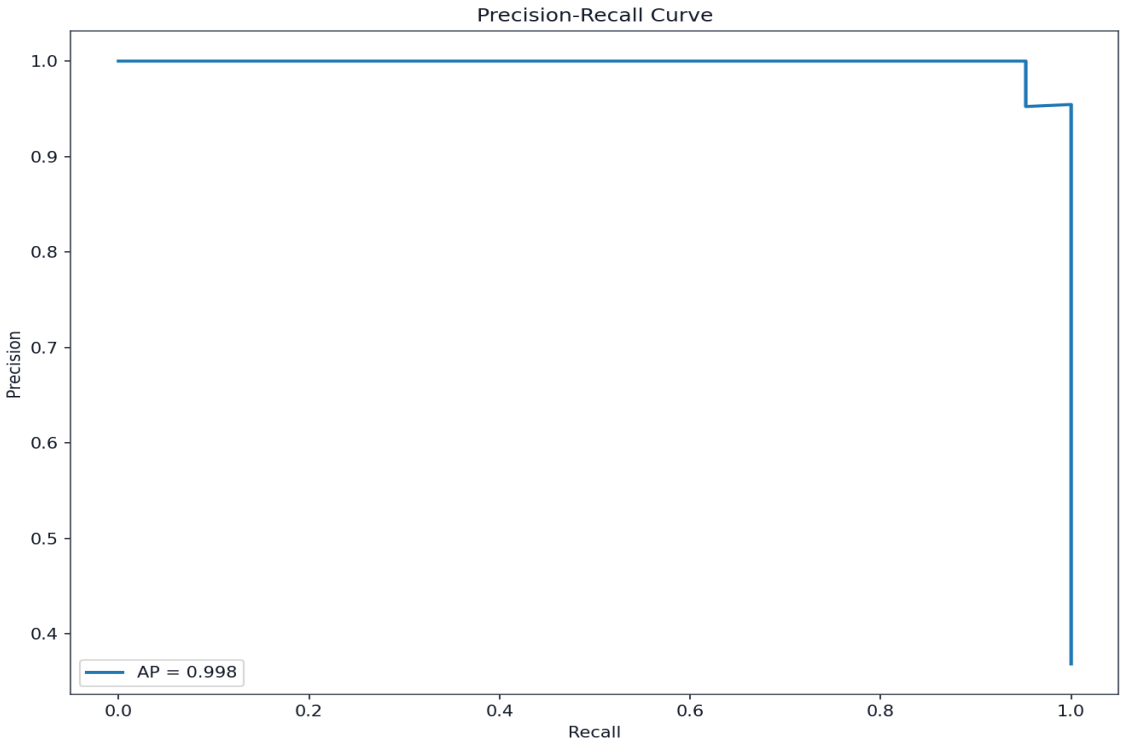
ROC Curve



Confusion Matrix



Precision-Recall



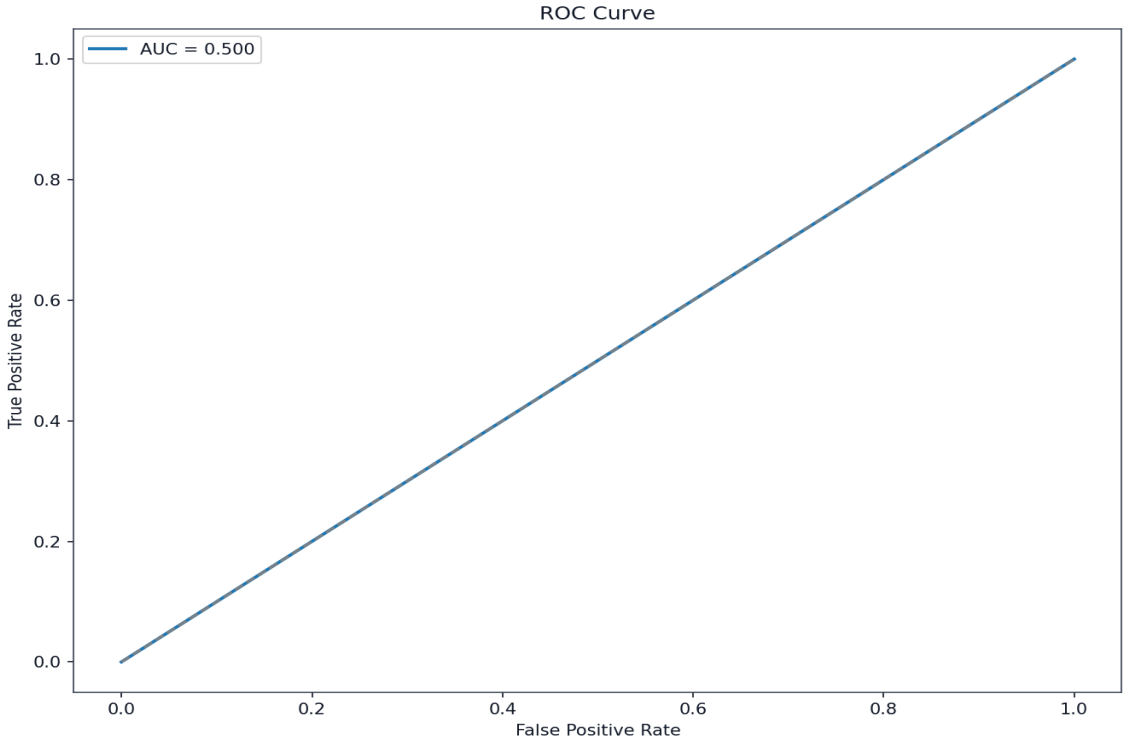
Feature Importances not available for stacking: Feature importance not directly available for stacking ensemble. Use individual base models instead.

Model: dl

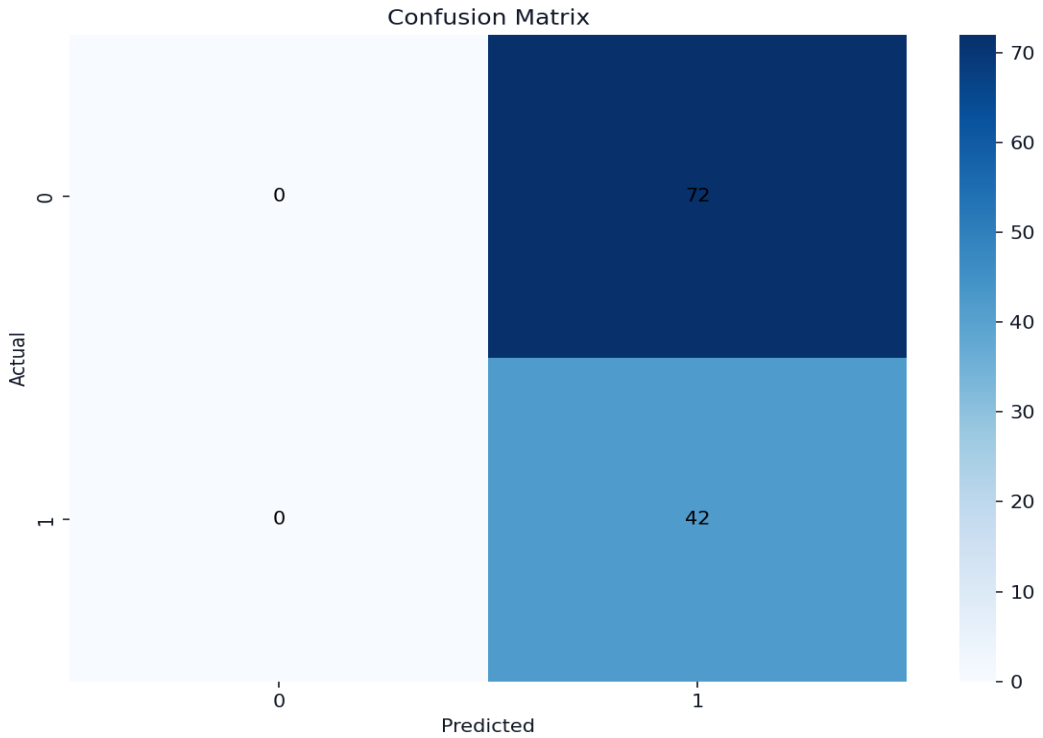
Model description: Deep learning model (Keras/TensorFlow). Outputs probability scores; feature importances are not natively available.

Field	Value
Model	dl
Prediction	1
Probability	1.0

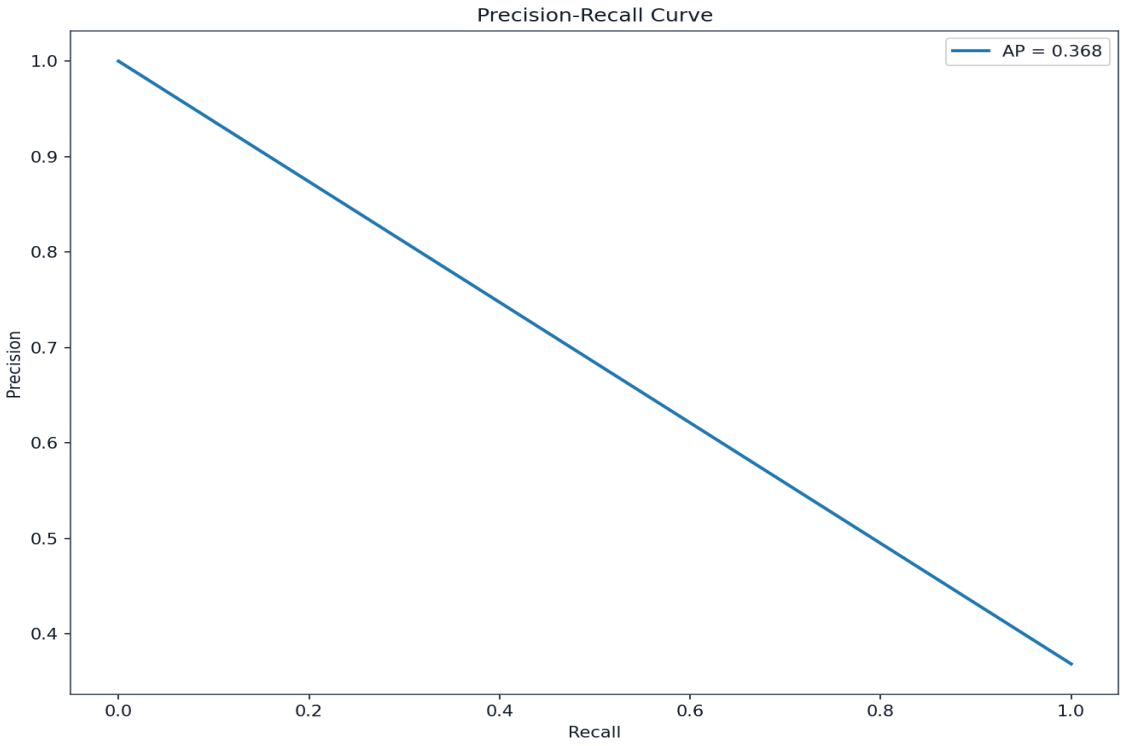
ROC Curve



Confusion Matrix



Precision-Recall



Feature Importances not available for dl: Feature importance not supported for deep learning models. Consider using SHAP or integrated gradients instead.

End of report