

Random Forest Result #150 — Analysis Report

Generated 2026-09-21 02:37:58 · 1 run(s) · CAT-G Data Analyzer

1. random forest (#150)

2026-09-21 02:16:24 · random_forest · status: completed

The classifier predicts the target with 95.6% cross-validated accuracy, weighted F1 0.955.

task_type	classification
accuracy_mean	0.955556
accuracy_std	0.031427
f1_mean	0.955079
f1_std	0.031769
n_classes	3

permutation importance

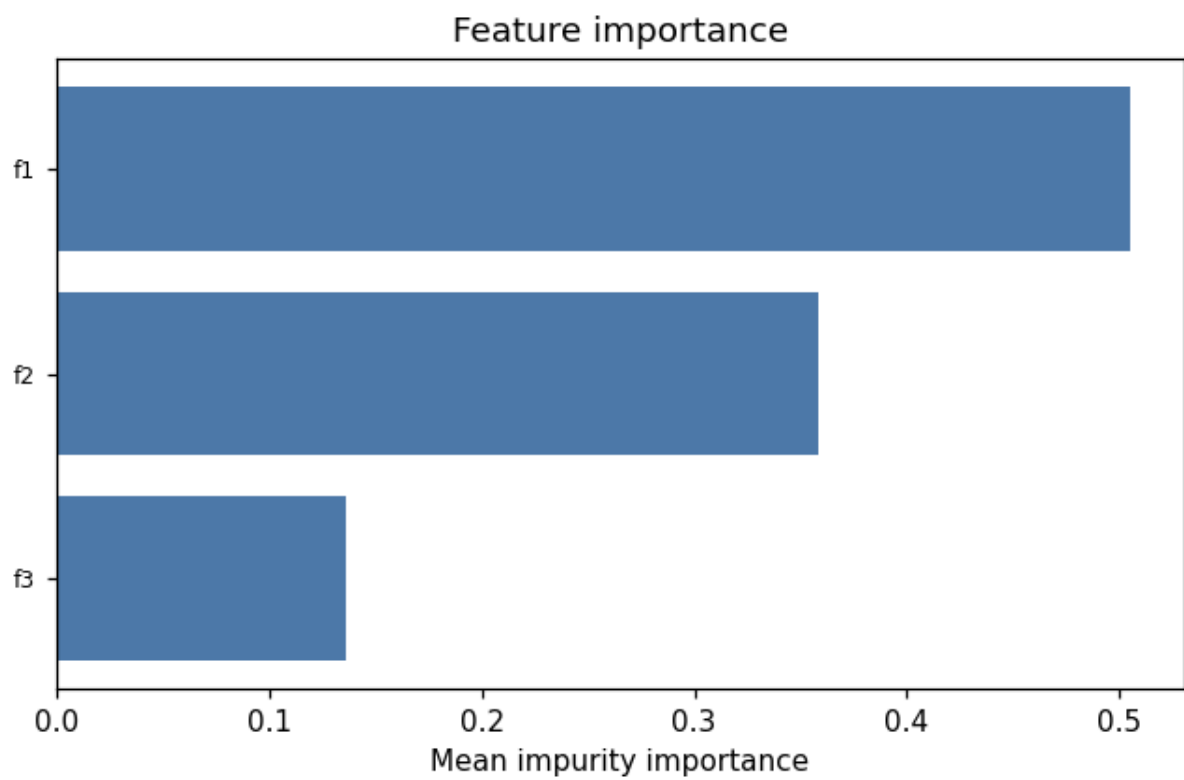
name	mean	std
f1	0.538889	0.053495
f2	0.123333	0.054637
f3	-0.015556	0.013699

shap importance

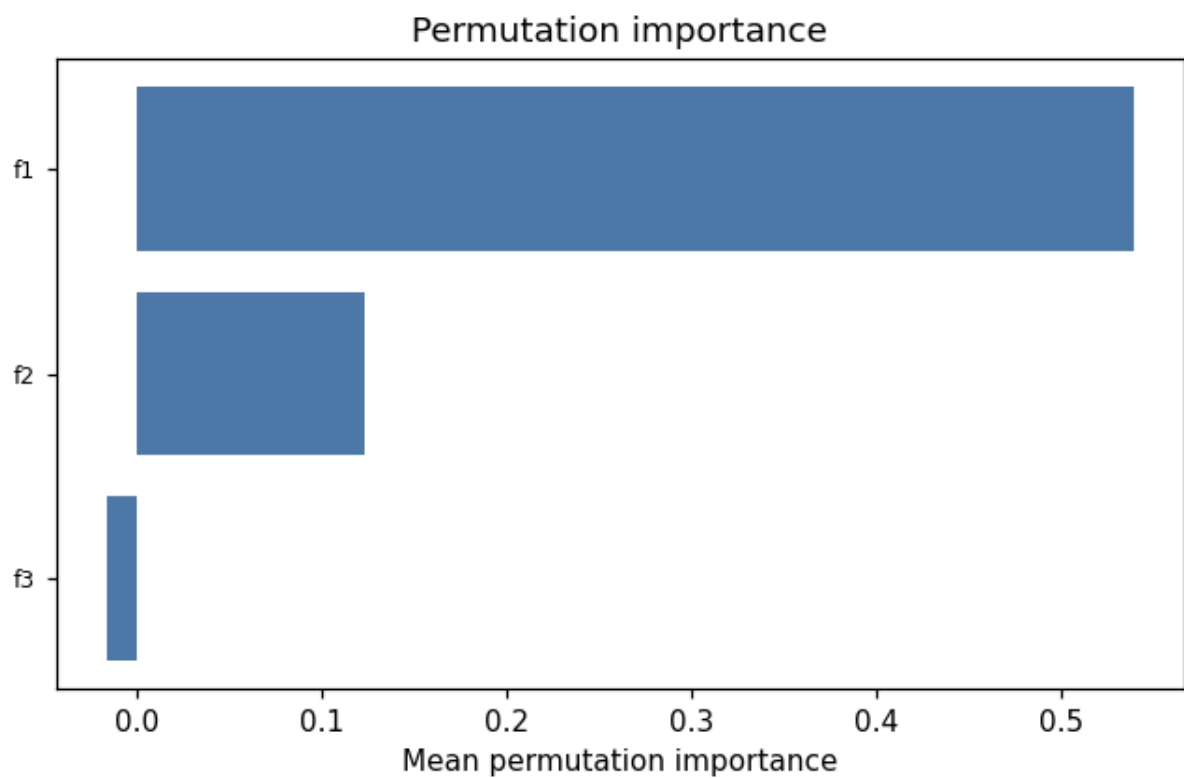
name	mean_abs
f1	0.248198
f2	0.131247
f3	0.033876

split metrics

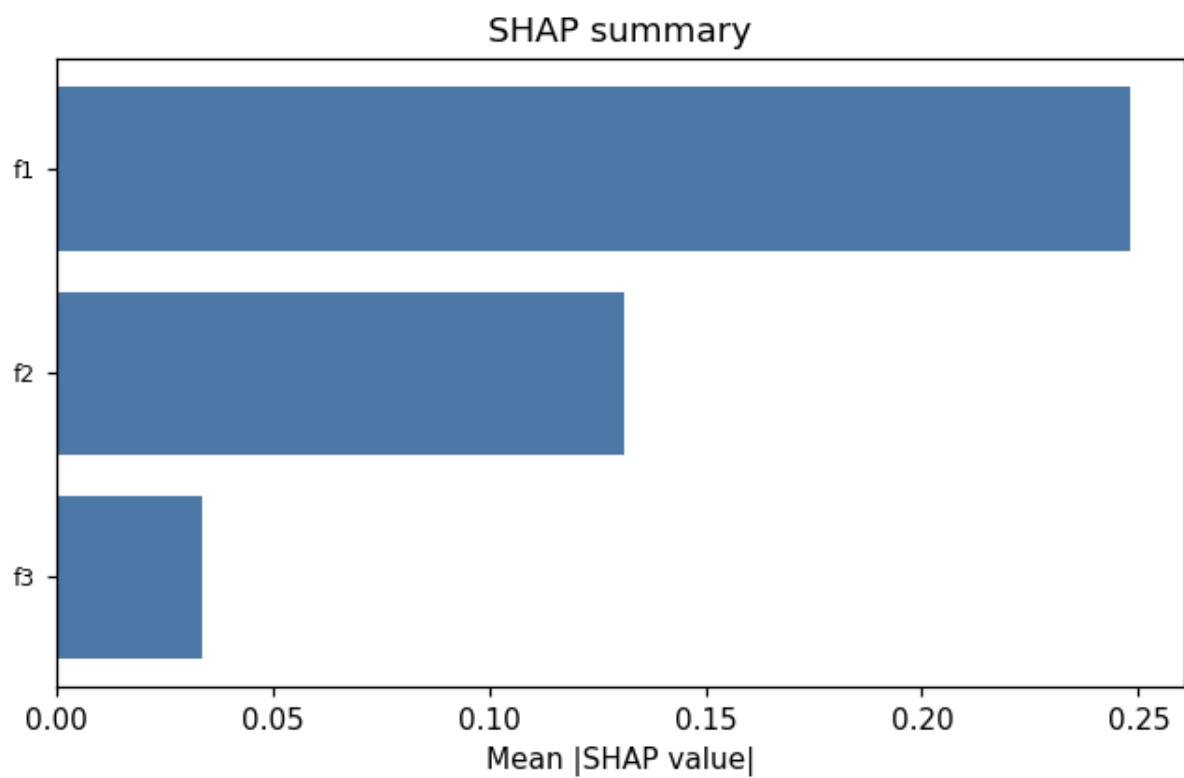
accuracy	f1_weighted
0.933333	0.931905
0.933333	0.933333
1.0	1.0



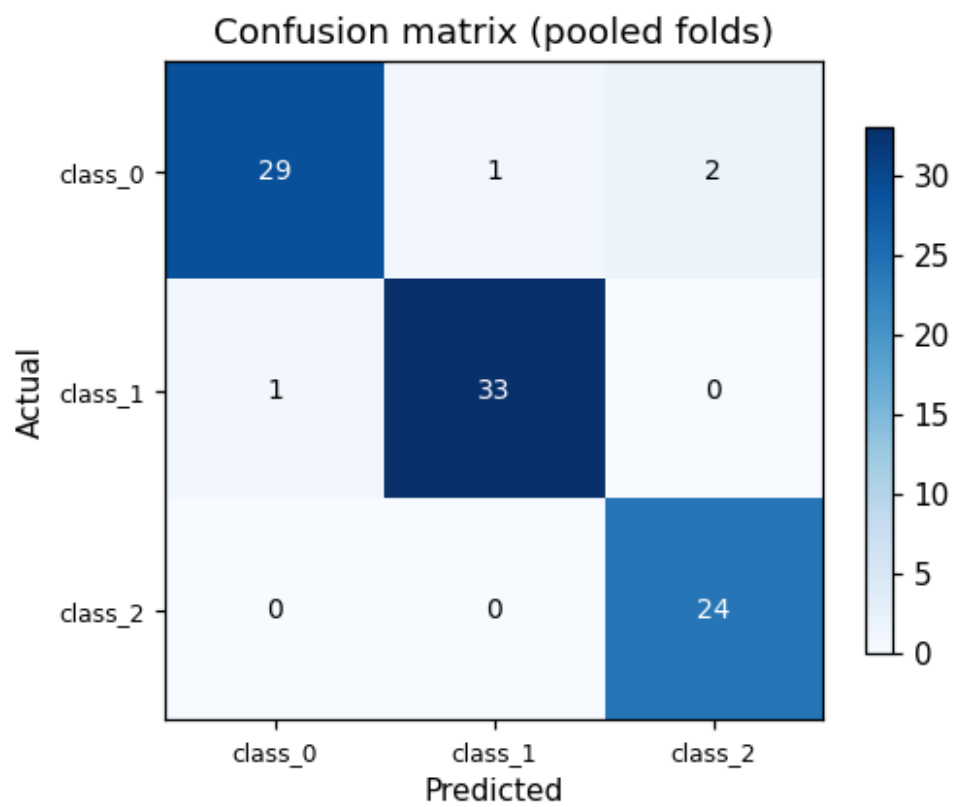
importance bar



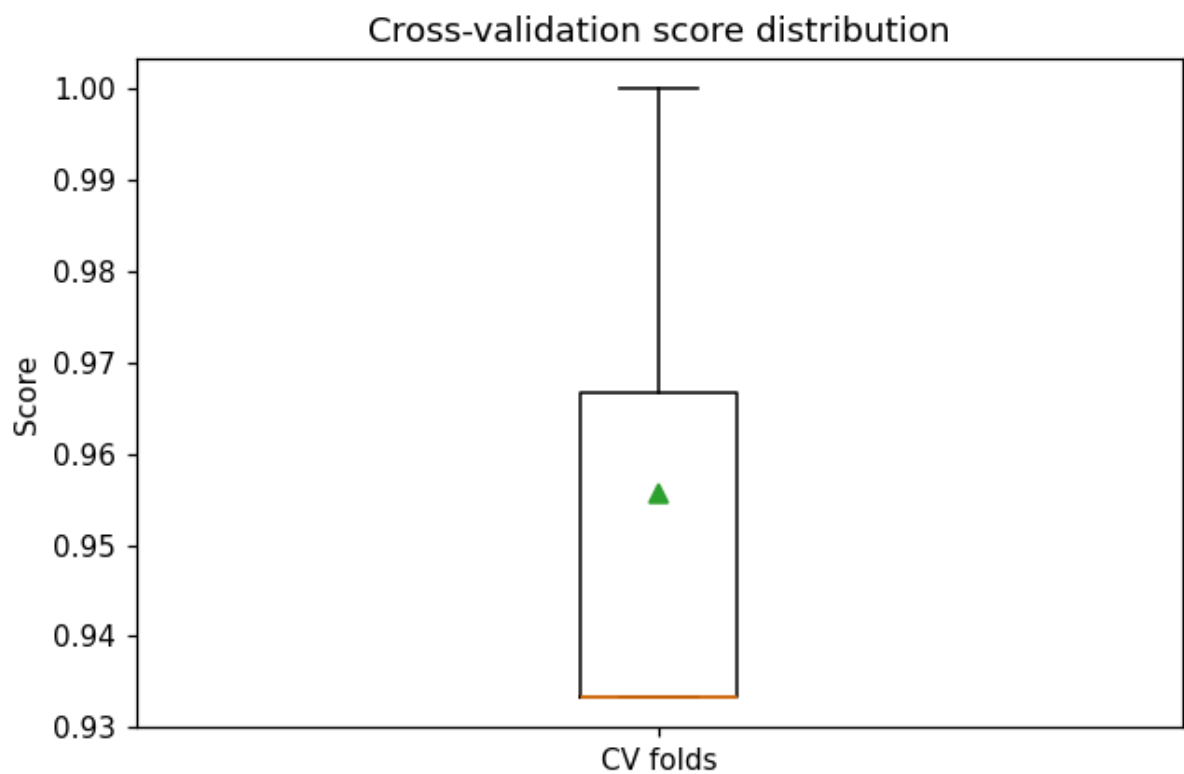
permutation bar



shap summary



confusion heatmap



cv boxplot

Method & Provenance

method	Random Forest (Classification)
engine	Python · scikit-learn 1.8.0
datasets	gallery — example_classification.csv
started	2026-09-21 02:16:24.643806
permanent link	https://cat-g-omxpert.wishartlab.com/results/by-token/75fc6b424d704db4b2f7621b482e

Parameter	Value
task_type	classification
model_type	classification
target_column	target
n_estimators	60
n_splits	3
test_size	0.25
run_univariate	True
run_permutation	True
run_shap	True
permutation_repeats	10
fdr_threshold	0.05

Command history

```
# python
from sklearn.ensemble import RandomForestClassifier

# python
model = RandomForestClassifier(n_estimators=60, random_state=42)

# python
scores = sklearn.model_selection.cross_val_score(model, X, y, cv=3)
```