# Analysis Results - Random Forest

| importance_mean |
|---|
| classification |
| 0.9555555555555556 |
| 0.03142696805273544 |
| 0.9550793650793651 |
| 0.03176903928183703 |
| 3 |
| [[29, 1, 2], [1, 33, 0], [0, 0, 24]] |
| [] |
| _size': 0.25, 'fdr_threshold': 0.05, 'permutation_repeats': 10, 'run_univariate': True, 'run_permutation': True, 'run_shap': True, 'categorical_en |
| ['class_0', 'class_1', 'class_2'] |
| 0.5051077511801073 |
| 0.3585208312850372 |
| 0.13637141753485557 |

## Pre-Modeling Statistics

| Feature | Pearson r | Pearson FDR | Spearman rho | Spearman FDR | ANOVA F | ANOVA FDR | Sig? |
|---|---|---|---|---|---|---|---|
| f1 | -0.4773 | 0.0000 | -0.4682 | 0.0000 | 34.8210 | 0.0000 | Yes |
| f2 | 0.3454 | 0.0002 | 0.3592 | 0.0001 | 15.9873 | 0.0002 | Yes |
| f3 | 0.1152 | 0.2104 | 0.1205 | 0.1898 | 1.5859 | 0.2104 | No |

## Permutation Importance

| Feature | Mean | SD |
|---|---|---|
| f1 | 0.5389 | 0.0535 |
| f2 | 0.1233 | 0.0546 |
| f3 | -0.0156 | 0.0137 |

## SHAP Values

| Feature | Mean \|Abs\| |
|---|---|
| f1 | 0.2482 |
| f2 | 0.1312 |
| f3 | 0.0339 |

## Per-Split Model Metrics

| Split | $R^2$ | MSE |
|---|---|---|
| | 0.0000 | 0.0000 |
| | 0.0000 | 0.0000 |
| | 0.0000 | 0.0000 |
| **Mean ± SD** | **0.0000 ± 0.0000** | **0.0000 ± 0.0000** |