Performance Comparison: device4 - Original Features (TPOT vs. ExtraTrees highlights AutoML impact)

Model	F1 Score	Training Time		
Bagging	0.6822	104.21s		
Stacking	0.6829	72.22s		
Voting	0.6809	13.73s		
ExtraTrees	0.6835	7.00s		
Blending	0.6796	13.91s		
TPOT (ExtraTrees)	0.6830	575.87s		

F1 Score Comparison: TPOT (0.6830) vs ExtraTrees (0.6835) Difference: -0.0005 (AutoML hyperparameter optimization impact)

device4 Comprehensive Comparison: Original vs BigFeat Features Positive F1 Diff (BigFeat - Original) indicates feature engineering improvement Positive F1 Diff (TPOT - ExtraTrees) indicates AutoML improvement over baseline

Model	Original F1 Score	BigFeat F1 Score	F1 Diff (BigFeat - Original)	Original Training Time	BigFeat Training Time Tra	ining Time Ratio (BigFeat/Origin	F1 Diff (TPOT - ExtraTrees)
Bagging	0.6822	0.6825	+0.0002	104.21s	272.74s	2.62x	
Stacking	0.6829	0.6831	+0.0002	72.22s	133.37s	1.85x	
Voting	0.6809	0.6809	-0.0000	13.73s	25.92s	1.89x	
ExtraTrees	0.6835	0.6839	+0.0005	7.00s	12.86s	1.84x	
Blending	0.6796	0.6789	-0.0006	13.91s	26.03s	1.87x	
TPOT (ExtraTrees)	0.6830	0.6839	+0.0009	575.87s	580.45s	1.01x	-0.0005