## Performance Comparison: device2 - Original Features (TPOT vs. ExtraTrees highlights AutoML impact)

Model	F1 Score	Training Time		
Bagging	0.6921	67.36s		
Stacking	0.6922	45.85s		
Voting	0.6859	8.31s		
ExtraTrees	0.6918	4.26s		
Blending	0.6816	8.37s		
TPOT (ExtraTrees)	0.6926	521.66s		

F1 Score Comparison: TPOT (0.6926) vs ExtraTrees (0.6918)
Difference: +0.0008 (AutoML hyperparameter optimization impact)

device2 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	0.6921	0.6953	+0.0031	67.36s	162.73s	2.42x	
Stacking	0.6922	0.6947	+0.0024	45.85s	84.16s	1.84x	
Voting	0.6859	0.6919	+0.0060	8.31s	15.75s	1.90x	
ExtraTrees	0.6918	0.6954	+0.0036	4.26s	5.97s	1.40x	
Blending	0.6816	0.6879	+0.0063	8.37s	15.78s	1.89x	
TPOT (ExtraTrees)	0.6926	0.6945	+0.0019	521.66s	518.43s	0.99x	+0.0008