

Test ID	n_estimators	criterion	max_depth	min_samples_split	min_samples_leaf	min_weight_fraction_leaf	max_features	max_leaf_nodes	min_impurity_decrease	bootstrap	oob_score	n_jobs	random_state	verbose	warm_start	ccp_alpha	max_samples	Test Purpose	Metrics scores r2 score
T001	100	squared_error	None	2	1	0	1	None	0	TRUE	FALSE	None	None	0	FALSE	0	None	Default/Baseline	0.9367
T002	50	squared_error	None	2	1	0	1	None	0	TRUE	FALSE	None	42	0	FALSE	0	None	Fewer trees with seed	0.9186
T003	200	squared_error	None	2	1	0	1	None	0	TRUE	FALSE	None	42	0	FALSE	0	None	More trees	0.9186
T004	100	absolute_error	None	2	1	0	1	None	0	TRUE	FALSE	None	42	0	FALSE	0	None	Different criterion (MAE)	0.905
T005	100	friedman_mse	None	2	1	0	1	None	0	TRUE	FALSE	None	42	0	FALSE	0	None	Friedman MSE criterion	0.9117
T006	100	poisson	None	2	1	0	1	None	0	TRUE	FALSE	None	42	0	FALSE	0	None	Poisson criterion	0.9008
T007	100	squared_error	5	2	1	0	1	None	0	TRUE	FALSE	None	42	0	FALSE	0	None	Limited tree depth	0.9113
T008	100	squared_error	10	2	1	0	1	None	0	TRUE	FALSE	None	42	0	FALSE	0	None	Moderate tree depth	0.9125
T009	100	squared_error	None	5	1	0	1	None	0	TRUE	FALSE	None	42	0	FALSE	0	None	Higher min_samples_split	0.9031
T010	100	squared_error	None	10	1	0	1	None	0	TRUE	FALSE	None	42	0	FALSE	0	None	Much higher min_samples_split	0.8726
T011	100	squared_error	None	2	5	0	1	None	0	TRUE	FALSE	None	42	0	FALSE	0	None	Higher min_samples_leaf	0.421
T012	100	squared_error	None	2	10	0	1	None	0	TRUE	FALSE	None	42	0	FALSE	0	None	Much higher min_samples_leaf	0.9034
T013	100	squared_error	None	2	1	0.1	1	None	0	TRUE	FALSE	None	42	0	FALSE	0	None	With weight fraction leaf	0.8477
T014	100	squared_error	None	2	1	0	0.5	None	0	TRUE	FALSE	None	42	0	FALSE	0	None	Reduced max_features	0.7209
T015	100	squared_error	None	2	1	0	0.3	None	0	TRUE	FALSE	None	42	0	FALSE	0	None	Low max_features	0.9102
T016	100	squared_error	None	2	1	0	1	50	0	TRUE	FALSE	None	42	0	FALSE	0	None	Limited leaf nodes	0.9102
T017	100	squared_error	None	2	1	0	1	100	0	TRUE	FALSE	None	42	0	FALSE	0	None	More leaf nodes	0.9125
T018	100	squared_error	None	2	1	0	1	None	0.01	TRUE	FALSE	None	42	0	FALSE	0	None	Min impurity decrease	0.7634
T019	100	squared_error	None	2	1	0	1	None	0	FALSE	FALSE	None	42	0	FALSE	0	None	No bootstrap	0.9125
T020	100	squared_error	None	2	1	0	1	None	0	TRUE	TRUE	None	42	0	FALSE	0	None	With OOB score	0.9125
T021	100	squared_error	None	2	1	0	1	None	0	TRUE	FALSE	-1	42	0	FALSE	0	None	Parallel processing (all cores)	0.9125
T022	100	squared_error	None	2	1	0	1	None	0	TRUE	FALSE	4	42	0	FALSE	0	None	Parallel processing (4 cores)	0.9125
T023	100	squared_error	None	2	1	0	1	None	0	TRUE	FALSE	None	42	1	FALSE	0	None	Verbose output	0.9125
T024	100	squared_error	None	2	1	0	1	None	0	TRUE	FALSE	None	42	0	TRUE	0	None	Warm start enabled	0.9125
T025	100	squared_error	None	2	1	0	1	None	0	TRUE	FALSE	None	42	0	FALSE	0.01	None	Pruning with ccp_alpha	0.9125
T026	100	squared_error	None	2	1	0	1	None	0	TRUE	FALSE	None	42	0	FALSE	0.05	None	Higher pruning	0.9125
T027	100	squared_error	None	2	1	0	1	None	0	TRUE	FALSE	None	42	0	FALSE	0	0.8	Subsample 80%	0.9139
T028	100	squared_error	None	2	1	0	1	None	0	TRUE	FALSE	None	42	0	FALSE	0	0.5	Subsample 50%	0.8927
T029	50	absolute_error	8	5	3	0	0.7	None	0	TRUE	TRUE	-1	42	0	FALSE	0	0.7	Combined regularization 1	0.8109
T030	150	friedman_mse	15	10	5	0.05	0.5	75	0.01	TRUE	FALSE	4	42	0	FALSE	0.02	0.6	Combined regularization 2	0.5845