

Model parameter	Impact on model performance	Parameter grid tested
Learning rate	Low values allow for better generalization	[0.05,0.04,0.03,0.02,0.01,0.009,0.007,0.003]
Boosting iterations	Large values improve performance, but risk overfitting	[2000,2400,2800,3200,3600,4000]
Maximum depth of a tree	Small numbers prevent overfitting	[2,3,4]
Minimum samples per leaf	Small values risk overfitting	[10,14,18]