

### S3 Appendix: Hyperparameters used in the models

Model	Parameters
Logistic Regression	$C = 1.0$
Decision Tree	$\text{criterion}=\text{gini}, \quad \text{min\_samples\_split} = 2,$ $\text{min\_samples\_leaf} = 1$
Random Forest	$\text{n\_estimators}=200,$ $\text{criterion}=\text{gini},$ $\text{max\_depth}=10,$ $\text{random\_state}=0,$ $\text{max\_features}=\text{None}$
XGB	$\text{learning\_rate}=0.01,$ $\text{n\_estimators}=1000,$ $\text{max\_depth}=6, \quad \text{gamma}=10, \quad \text{subsample} =$ $0.8, \text{colsample\_bytree} = 0.4, \text{scale\_pos\_weight}=1,$ $\text{objective}=\text{binary:logistic}, \text{reg\_alpha} = 0.3$