

Table 1: Model complexity: n is the number of training samples, f the number of features, n_{trees} is the number of trees.

| Machine learning model | Training complexity |
|------------------------------|---------------------|
| Logistic regression | $O(nf)$ |
| SVM with linear kernel | $O(nf)$ |
| SVM with radial basis kernel | $O(n^2f)$ |
| Decision tree | $O(n^2f)$ |
| Random forest | $O(n^2fn_{trees})$ |
| XGBoost | $O(nfn_{trees})?$ |