



Option 2: Cross-Validation

- Partition the original data (randomly) into a training set and a test set. (e.g. 70/30)
- Train a model using the training set and evaluate performance (a single time) on the test set.

Training Set vs. Test Set





K-fold

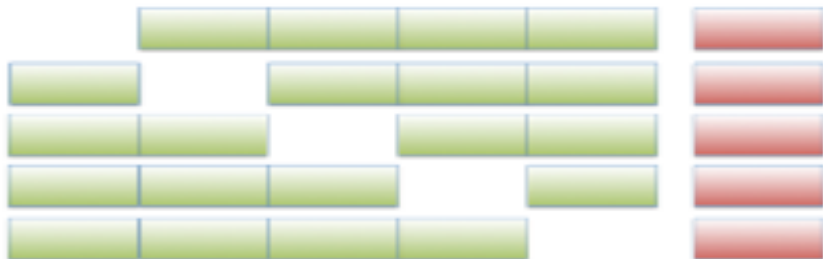
Cross-validation

- Train and test K models using separate folds.
- Average the model performance over the K test sets.
- Report cross-validated metrics.

FULL DATA

TRAIN

TEST



Validation & Cross-Validation H2O Parameters

Choose one of two approaches:

1. Validation

- **validation_frame**: id of the validation data frame.

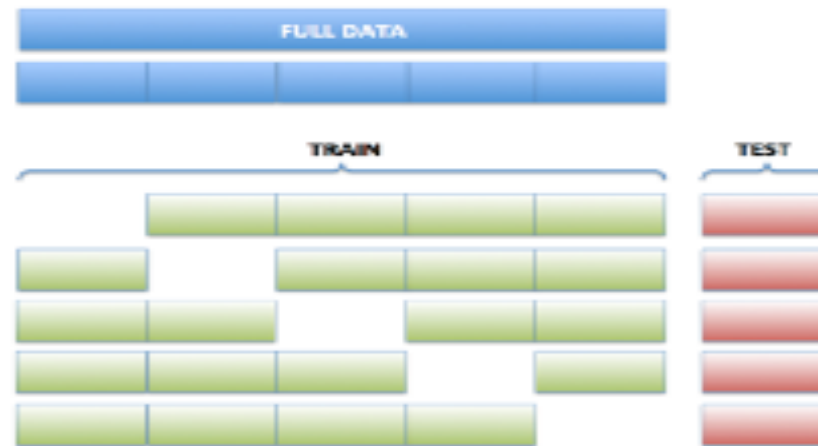
2. Cross-Validation

- **nfolds**: number of folds for k-fold cross-validation
- **fold_column**: column with cross-validation fold index assignment per observation.
- **fold_assignment**: cross-validation fold assignment scheme, if fold column is not specified.
- **keep_cross_validation_fold_assignment**: keep the cross-validation fold assignment.
- **keep_cross_validation_predictions**: keep the predictions of the cross-validation models.

Option 2: Cross-Validation

Training Set vs. Test Set

- Partition the original data (randomly) into a training set and a test set. (e.g. 70/30)
- Train a model using the training set and evaluate performance (a single time) on the test set.



K-fold
Cross-validation

- Train and test K models using separate folds.
- Average the model performance over the K test sets.
- Report cross-validated metrics.