Metodi di cross-validation in Scikit-learn:

HOLD_OUT:

`sklearn.model_selection.`**`train_test_split`**(**arrays*, ***options*)

K-FOLD CV

`sklearn.model_selection.`**`cross_val_score`**(*estimator*, *X*, *y=None*, *groups=None*, *scoring=None*, *cv=None*, *n_jobs=1*, *verbose=0*, *fit_params=None*, *pre_dispatch='2*n_jobs'*)

`sklearn.model_selection.`**`cross_val_predict`**(*estimator*, *X*, *y=None*, *groups=None*, *cv=None*, *n_jobs=1*, *verbose=0*, *fit_params=None*, *pre_dispatch='2*n_jobs'*, *method='predict'*)

When the `cv` argument is an integer, `cross_val_score` uses the `KFold` or

`StratifiedKFold` strategies by default, the latter being used if the estimator is a classifier

Cross-validation generators (genera solo gli indici per effettuare la CV)

`KFold` **(n_splits, shuffle, random_state)**	`StratifiedKFold` **(n_iter, test_size, train_size, random_state)**	`GroupKFold` **(n_splits, shuffle, random_state)**
Splits it into K folds, trains on K-1 and then tests on the left-out.	Same as K-Fold but preserves the class distribution within each fold.	Ensures that the same group is not in both testing and training sets.

`ShuffleSplit` **(n_iter, test_size, train_size, random_state)**	`StratifiedShuffleSplit`	`GroupShuffleSplit`
Generates train/test indices based on random permutation.	Same as shuffle split but preserves the class distribution within each iteration.	Ensures that the same group is not in both testing and training sets.

`LeaveOneGroupOut` **()**	`LeavePGroupsOut` **(p)**	`LeaveOneOut` **()**
Takes a group array to group observations.	Leave P groups out.	Leave one observation out.

`LeavePOut` **(p)**	`PredefinedSplit`
Leave P observations out.	Generates train/test indices based on predefined splits.