

DATA SCIENCE

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ACÁMICA

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Validación y testeo de modelos

- train set.

Validación y testeo de modelos

- train set.
- test set.

Validación y testeo de modelos

- train set.
- test set.
- Validation set.

Validación y testeo de modelos

- train set \rightarrow 80 %.

Validación y testeo de modelos

- train set \rightarrow 80 %.
- test set \rightarrow 20 %.

Validación y testeo de modelos

- `train_test_split.`

Validación y testeo de modelos

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- `X_train, X_test, y_train, y_test = train_test_split(X,y, test_size = 0.5)`.

Validación y testeo de modelos

- `train_test_split`.
- `X_train, X_test, y_train, y_test = train_test_split(X,y, test_size = 0.5)`.
- `X_train, X_test, y_train, y_test = train_test_split(X,y, stratify = y)`.

- MSE.

Cross Validation

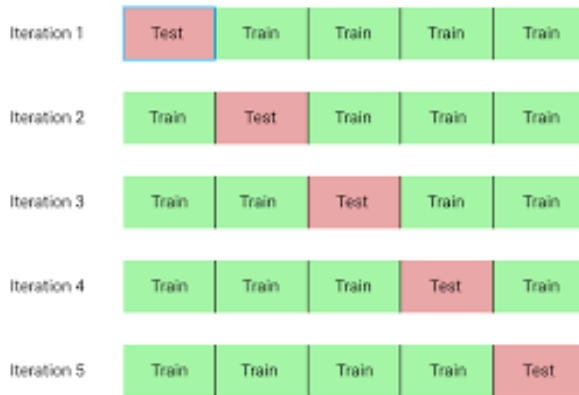
- Kfold cross validation.

Cross Validation

- Kfold cross validation.

Cross Validation

- Kfold cross validation.



Cross Validation

- random cross validation.

Cross Validation

- random cross validation.

Cross Validation

- random cross validation.

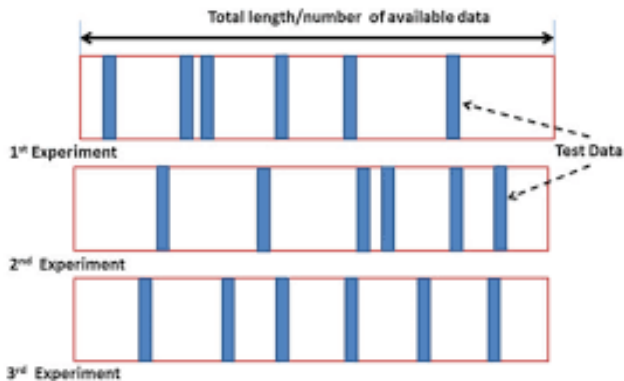


Fig. 3.7 Data splitting in the random sub-sampling approach

Cross Validation

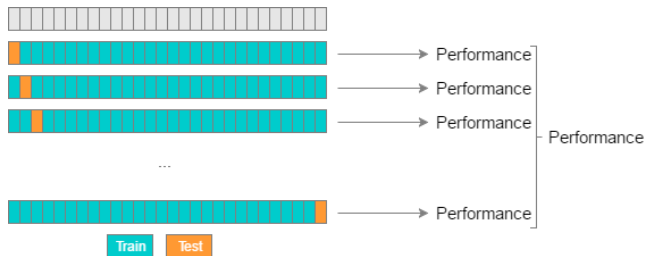
- Leave one out.

Cross Validation

- Leave one out.

Cross Validation

- Leave one out.



Cross Validation

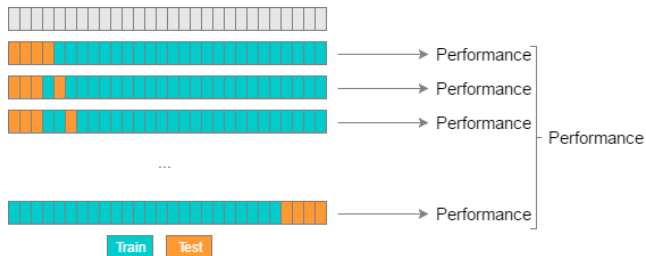
- Leave p out.

Cross Validation

- Leave p out.

Cross Validation

- Leave p out.



Cross Validation score

- `cross_val_score(modelo, X_train, y_train, scoring = métrica, cv = cantidad de iteraciones)`

- Matriz de confusión.

- Matriz de confusión.

- Matriz de confusión.

		Predicción	
		Positivos	Negativos
Observación	Positivos	Verdaderos Positivos (VP)	Falsos Negativos (FN)
	Negativos	Falsos Positivos (FP)	Verdaderos Negativos (VN)

Métricas

- Precisión.

Métricas

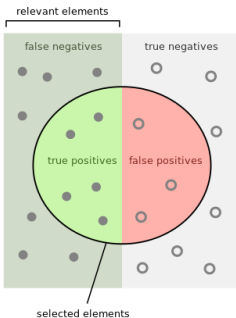
- Precisión.
- Recall.

Métricas

- Precisión.
- Recall.

Métricas

- Precisión.
- Recall.



How many selected items are relevant?

$$\text{Precision} = \frac{\text{true positives}}{\text{true positives} + \text{false positives}}$$

How many relevant items are selected?

$$\text{Recall} = \frac{\text{true positives}}{\text{true positives} + \text{false negatives}}$$