sklearn.datasets.load_diabetes

`sklearn.datasets.load_diabetes`(*, *return_X_y=False*, *as_frame=False*, *scaled=True*) [source]

Load and return the diabetes dataset (regression).

Samples total	442
Dimensionality	10
Features	real, -.2 < x < .2
Targets	integer 25 - 346

Note: The meaning of each feature (i.e. `feature_names`) might be unclear (especially for `ltg`) as the documentation of the original dataset is not explicit. We provide information that seems correct in regard with the scientific literature in this field of research.

Read more in the User Guide.

Parameters:

return_X_y : *bool, default=False*

If True, returns `(data, target)` instead of a Bunch object. See below for more information about the `data` and `target` object.

New in version 0.18.

as_frame : *bool, default=False*

If True, the data is a pandas DataFrame including columns with appropriate dtypes (numeric). The target is a pandas DataFrame or Series depending on the number of target columns. If `return_X_y` is True, then (`data`, `target`) will be pandas DataFrames or Series as described below.

New in version 0.23.

scaled : *bool, default=True*

If True, the feature variables are mean centered and scaled by the standard deviation times the square root of `n_samples`. If False, raw data is returned for the feature variables.

New in version 1.1.

Returns:

data : *Bunch*

Dictionary-like object, with the following attributes.

ndarray, dataframe} of shape (442, 10)

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The data matrix. If `as_frame=True`, `data` will be a pandas DataFrame.

target: {ndarray, Series} of shape (442,)
The regression target. If `as_frame=True`, `target` will be a pandas Series.

feature_names: list
The names of the dataset columns.

frame: DataFrame of shape (442, 11)
Only present when `as_frame=True`. DataFrame with `data` and `target`.

New in version 0.23.

DESCR: str
The full description of the dataset.

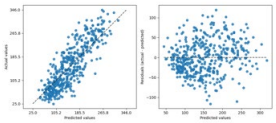
data_filename: str
The path to the location of the data.

target_filename: str
The path to the location of the target.

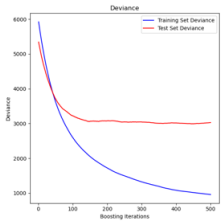
(data, target) : *tuple if `return_X_y` is True*
Returns a tuple of two ndarray of shape (n_samples, n_features) A 2D array with each row representing one sample and each column representing the features and/or target of a given sample.

New in version 0.18.

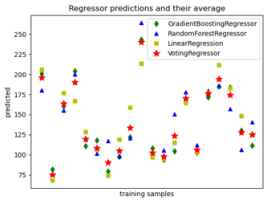
Examples using `sklearn.datasets.load_diabetes`



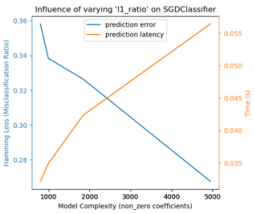
Release Highlights for scikit-learn 1.2



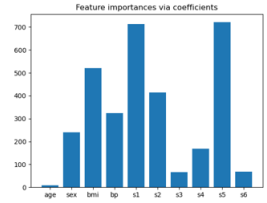
Gradient Boosting regression



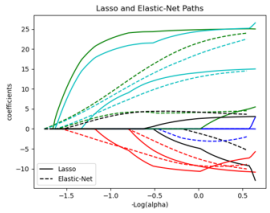
Plot individual and voting regression predictions



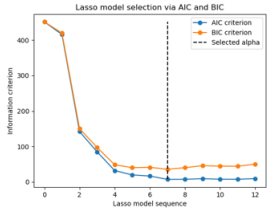
Model Complexity Influence



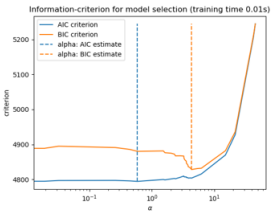
Model-based and sequential feature selection



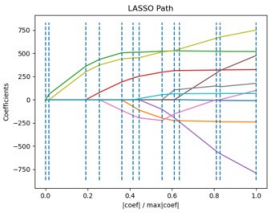
Lasso and Elastic Net



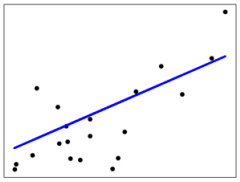
Lasso model selection via information criteria



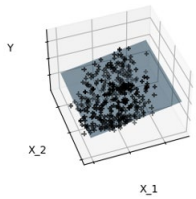
Lasso model selection: AIC-BIC / cross-validation



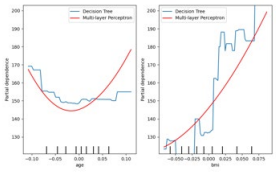
Lasso path using LARS



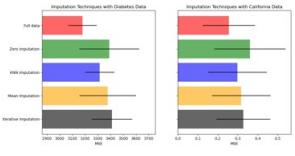
Linear Regression Example



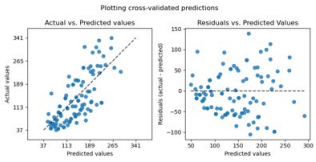
Sparsity Example: Fitting only features 1 and 2



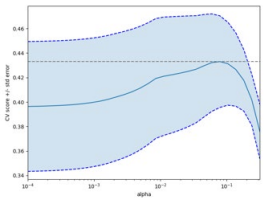
Advanced Plotting With Partial Dependence



Imputing missing values before building an estimator



Plotting Cross-Validated Predictions



Cross-validation on diabetes Dataset Exercise