sklearn.datasets.fetch_california_housing

sklearn.datasets.fetch_california_housing(*, data_home=None, download_if_missing=True, return_X_y=False, as_frame=False)

[source]

Load the California housing dataset (regression).

| Samples total | 20640 |
|----------------|----------------|
| Dimensionality | 8 |
| Features | real |
| Target | real 0.15 - 5. |
| 4 | |

Read more in the User Guide.

Parameters:

data_home : str or path-like, default=None

Specify another download and cache folder for the datasets. By default all scikit-learn data is stored in '~/scikit_learn_data' subfolders.

download_if_missing : bool, default=True

If False, raise an OSError if the data is not locally available instead of trying to download the data from the source site.

return_X_y : bool, default=False

If True, returns (data.data, data.target) instead of a Bunch object.

New in version 0.20.

as_frame : bool, default=False

If True, the data is a pandas DataFrame including columns with appropriate dtypes (numeric, string or categorical). The target is a pandas DataFrame or Series depending on the number of target_columns.

New in version 0.23.

Returns:

dataset : Bunch

Dictionary-like object, with the following attributes.

data: ndarray, shape (20640, 8)

Each row corresponding to the 8 feature values in order. If as_frame is True, data is a pandas object.

target: numpy array of shape (20640,)

Each value corresponds to the average house value in units of 100,000. If as_frame is True, target is a pandas object.

feature_names : list of length 8

Array of ordered feature names used in the dataset.

DESCR: str

Description of the California housing dataset.

frame: pandas DataFrame

Only present when as_frame=True. DataFrame with data and target.

New in version 0.23.

(data, target): tuple if return_X_y is True

A tuple of two ndarray. The first containing a 2D array of shape (n_samples, n_features) with each row representing one sample and each column representing the features. The second ndarray of shape (n_samples,) containing the target samples.

New in version 0.20.



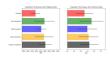
$\textbf{Examples using} \ \texttt{sklearn.datasets.fetch_california_housing}$



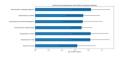
Release Highlights for scikit-learn 0.24



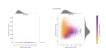
Comparing Random Forests and Histogram Gradient Boosting models



Imputing missing values before building an estimator



Imputing missing values with variants of IterativeImputer



Compare the effect of different scalers on data with outliers

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