

[sklearn.pipeline.make_pipeline](#)

`sklearn.pipeline.make_pipeline(*steps, memory=None, verbose=False)`

[\[source\]](#)

Construct a [Pipeline](#) from the given estimators.

This is a shorthand for the [Pipeline](#) constructor; it does not require, and does not permit, naming the estimators. Instead, their names will be set to the lowercase of their types automatically.

Parameters:

***steps : list of Estimator objects**

List of the scikit-learn estimators that are chained together.

memory : str or object with the joblib.Memory interface, default=None

Used to cache the fitted transformers of the pipeline. By default, no caching is performed. If a string is given, it is the path to the caching directory. Enabling caching triggers a clone of the transformers before fitting. Therefore, the transformer instance given to the pipeline cannot be inspected directly. Use the attribute `named_steps` or `steps` to inspect estimators within the pipeline. Caching the transformers is advantageous when fitting is time consuming.

verbose : bool, default=False

If True, the time elapsed while fitting each step will be printed as it is completed.

Returns:

p : Pipeline

Returns a scikit-learn [Pipeline](#) object.

<

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See also:

[Pipeline](#)

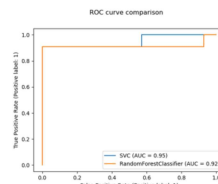
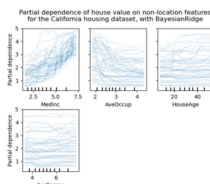
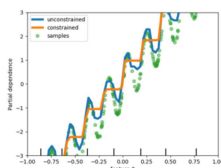
Class for creating a pipeline of transforms with a final estimator.

Examples

```
>>> from sklearn.naive_bayes import GaussianNB
>>> from sklearn.preprocessing import StandardScaler
>>> from sklearn.pipeline import make_pipeline
>>> make_pipeline(StandardScaler(), GaussianNB(priors=None))
Pipeline(steps=[('standardscaler', StandardScaler()),
                 ('gaussiannb', GaussianNB())])
```

>>>

Examples using `sklearn.pipeline.make_pipeline`



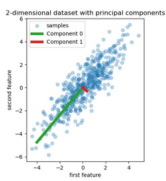
[Release Highlights for
scikit-learn 1.0](#)

[Release Highlights for
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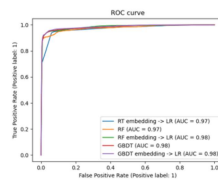
[Release Highlights for
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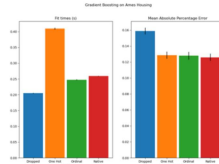
[A demo of K-Means
clustering on the
handwritten digits](#)



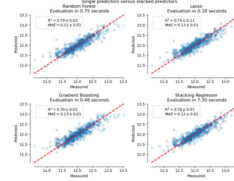
[Principal Component Regression vs Partial Least Squares Regression](#)



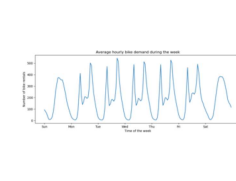
[Feature transformations with ensembles of trees](#)



[Categorical Feature Support in Gradient Boosting](#)



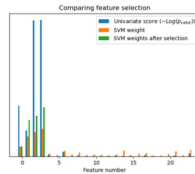
[Combine predictors using stacking](#)



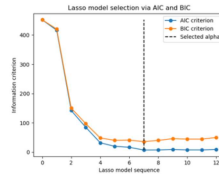
[Time-related feature engineering](#)



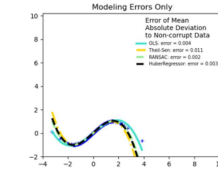
[Pipeline ANOVA SVM](#)



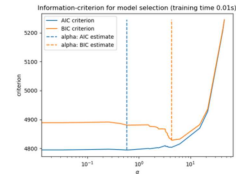
[Univariate Feature Selection](#)



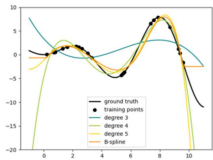
[Lasso model selection via information criteria](#)



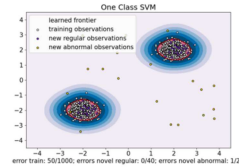
[Robust linear estimator fitting](#)



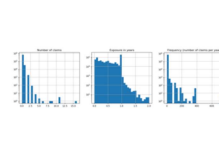
[Lasso model selection: AIC-BIC / cross-validation](#)



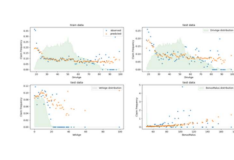
[Polynomial and Spline interpolation](#)



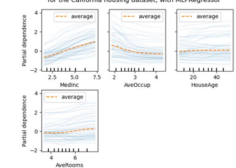
[One-Class SVM versus One-Class SVM using Stochastic Gradient Descent](#)



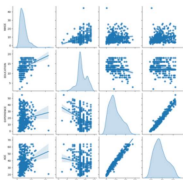
[Poisson regression and non-normal loss](#)



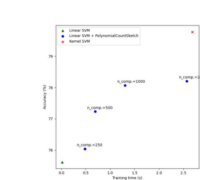
[Tweedie regression on insurance claims](#)



[Partial Dependence and Individual Conditional Expectation Plots](#)



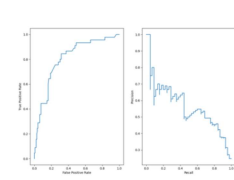
[Common pitfalls in the interpretation of coefficients of linear models](#)



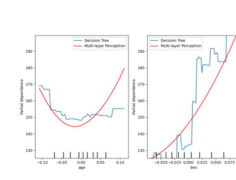
[Scalable learning with polynomial kernel approximation](#)



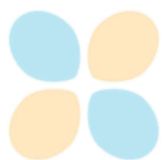
[Manifold learning on handwritten digits: Locally Linear Embedding, Isomap...](#)



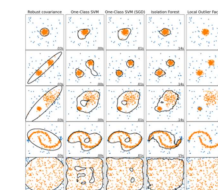
[Visualizations with Display Objects](#)



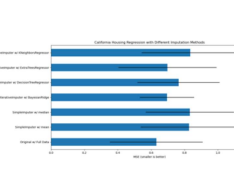
[Advanced Plotting With Partial Dependence](#)



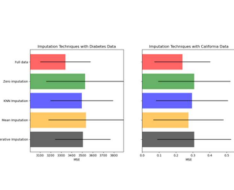
[Displaying Pipelines](#)



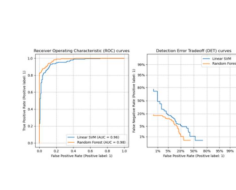
[Comparing anomaly detection algorithms for outlier detection](#)



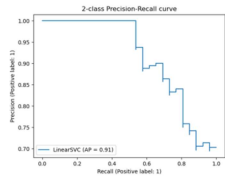
[Imputing missing values with variants of IterativeImputer](#)



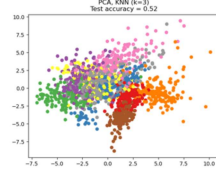
[Imputing missing values before building an estimator](#)



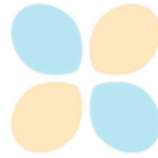
[Detection error trade-off \(DET\) curve](#)



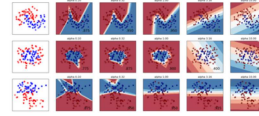
[Precision-Recall](#)



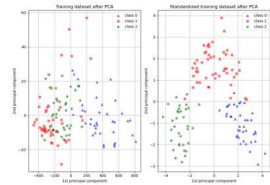
[Dimensionality Reduction with Neighborhood Components Analysis](#)



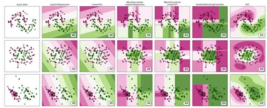
[Approximate nearest neighbors in TSNE](#)



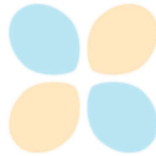
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