

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.


See also:

[Pipeline](#)
Class for creating a pipeline of transforms with a final estimator.

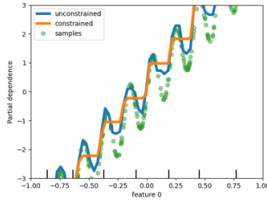
Examples

```
>>> 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())])
```

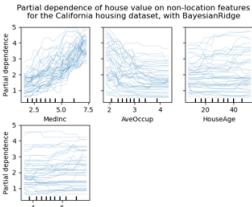
Examples using sklearn.pipeline.make_pipeline



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



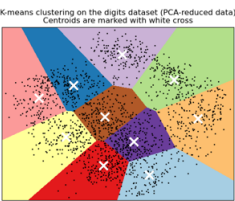
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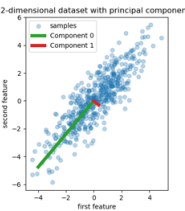
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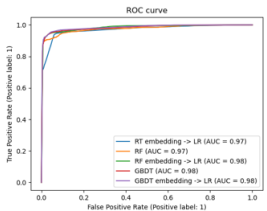
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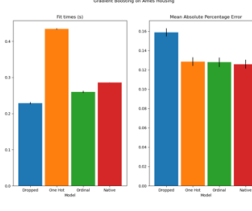
[A demo of K-Means clustering on the handwritten digits data](#)



[Principal Component Partial](#)



[Feature transformations with ensembles](#)



[Categorical Feature Support in Gradient](#)



[Combine predictors using stacking](#)

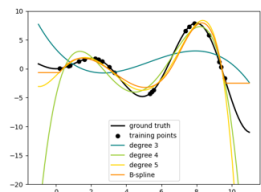


[Time-related feature engineering](#)

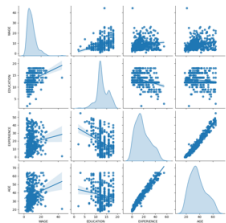
[Least Squares Regression](#)



[Pipeline ANOVA SVM](#)



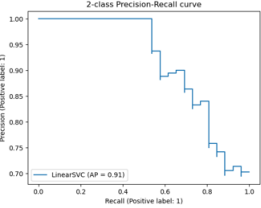
[Polynomial and Spline interpolation](#)



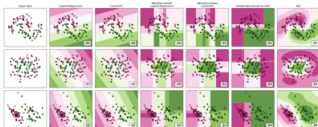
[Common pitfalls in the interpretation of coefficients of linear models](#)



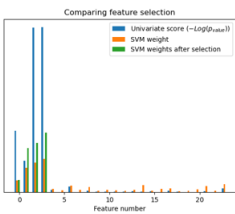
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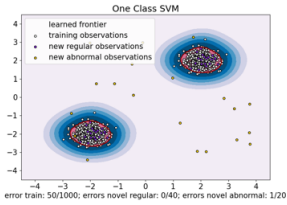
[Precision-Recall](#)



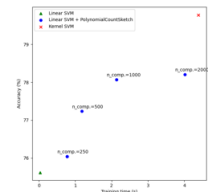
[of trees](#)



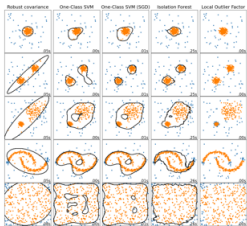
[Univariate Feature Selection](#)



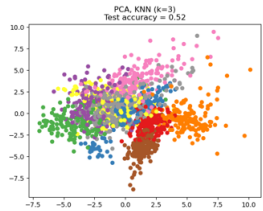
[One-Class SVM versus One-Class SVM using Stochastic Gradient Descent](#)



[Scalable learning with polynomial kernel approximation](#)



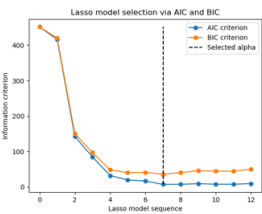
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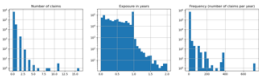
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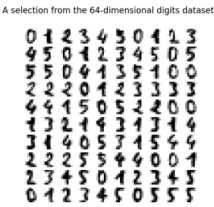
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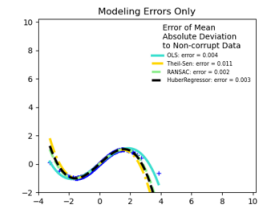
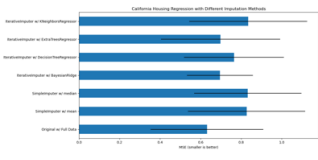
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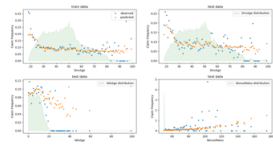
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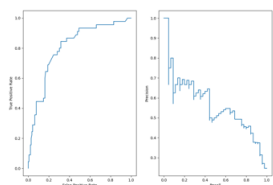
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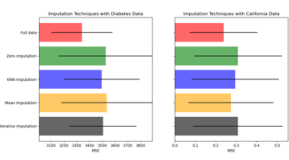
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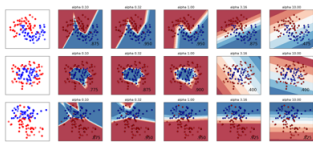
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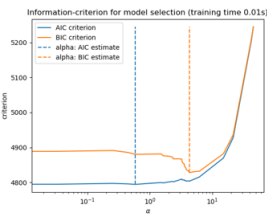
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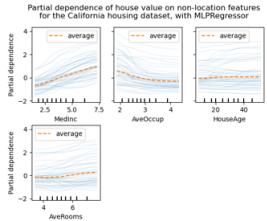
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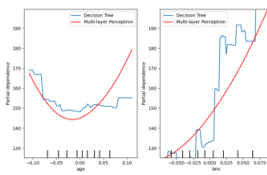
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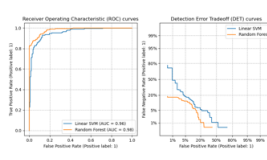
[Lasso model selection: AIC-BIC / cross-validation](#)



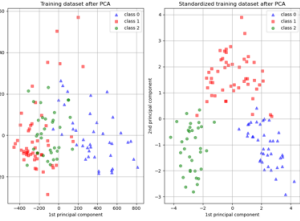
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[Advanced Plotting With Partial Dependence](#)



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



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