

SUPPORT VECTOR REGRESSION API SUMMARY

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Support Vector Regression (SVR) uses the same principle as SVM, but for regression problems.

sklearn.svm.SVR

```
class sklearn.svm.SVR(*, kernel='rbf', degree=3, gamma='scale',
coef0=0.0, tol=0.001, C=1.0, epsilon=0.1, shrinking=True,
cache_size=200, verbose=False, max_iter=- 1)
```

PARAMETERS:

- kernel: {'linear', 'poly', 'rbf', 'sigmoid', 'precomputed'}, default='rbf'
- degree: int, default=3
- gamma: {'scale', 'auto'} or float, default='scale'
 - if gamma='scale' (default) is passed then it uses $1 / (n_features * X.var())$ as value of gamma,
 - if 'auto', uses $1 / n_features$.
- coef0: float, default=0.0
- tol: float, default=1e-3
- C: float, default=1.0
- epsilon: float, default=0.1
- shrinking: bool, default=True
- cache_size: float, default=200
- verbose: bool, default=False
- max_iter: int, default=-1

ATTRIBUTES:

- class_weight_: ndarray of shape (n_classes,)
- coef_: ndarray of shape (1, n_features)
- dual_coef_: ndarray of shape (1, n_SV)
- fit_status_: int
- intercept_: ndarray of shape (1,)
- n_support_: ndarray of shape (n_classes,), dtype=int32
- shape_fit_: tuple of int of shape (n_dimensions_of_X,)
- support_: ndarray of shape (n_SV,)
- support_vectors_: ndarray of shape (n_SV, n_features)