# QuantileCV

## mod quantile\_cv

Definition for RegressionCV.

class QuantileCV

Bases: RegressionCV

Defines an auto regression tree, based on the bayesian optimization base class.

```
~
```

```
class QuantileCV(RegressionCV):
16
17
18
         Defines an auto regression tree, based on the bayesian optimization base
19
     class.
20
21
22
         @validate_call(config={"arbitrary_types_allowed": True})
23
         def __init__(
24
             self,
25
             alpha: NonNegativeFloat,
             cv: BaseCrossValidator,
26
27
            n_trials: NonNegativeInt,
             timeout: NonNegativeInt,
28
29
             config: RegressionCVConfig,
30
         ) -> None:
31
32
             Constructor for RegressionCV.
33
34
             Args:
35
                 metric: Loss metric to use as base for the estimation process.
36
                 cv: Splitter object to use when estimating the model.
37
                 n_trials: Number of optimization trials to use when finding a
38
    model.
39
                 timeout: Timeout in seconds to stop the optimization.
40
                 config: Configuration to use when fitting the model.
41
             super().__init__("quantile", cv, n_trials, timeout, config)
42
43
             self.alpha_ = alpha
44
45
         @property
         def scorer(self) -> tp.Callable[..., float]:
46
47
             Returns correct scorer to use when scoring with RegressionCV.
48
49
50
             return make_scorer(
51
                 update_wrapper(
52
                     partial(
                         regression_metrics["quantile"],
53
                         alpha=self.alpha_,
54
55
56
                     regression_metrics["quantile"],
57
                 ),
                 greater_is_better=False,
```

### attr scorer property

Returns correct scorer to use when scoring with Regression CV.

meth \_\_init\_\_

```
__init__(alpha, cv, n_trials, timeout, config)
```

Constructor for RegressionCV.

### Parameters:

Name	Туре	Description	Default
metric		Loss metric to use as base for the estimation process.	required
CV	BaseCrossValidator	Splitter object to use when estimating the model.	required
n_trials	NonNegativeInt	Number of optimization trials to use when finding a model.	required
timeout	NonNegativeInt	Timeout in seconds to stop the optimization.	required
config	RegressionCVConfig	Configuration to use when fitting the model.	required

#### 50 Source code in src/tree\_machine/quantile\_cv.py

```
21
    @validate_call(config={"arbitrary_types_allowed": True})
22
   def __init__(
23
        self,
24
        alpha: NonNegativeFloat,
25
        cv: BaseCrossValidator,
        n_trials: NonNegativeInt,
26
27
        timeout: NonNegativeInt,
28
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        super().__init__("quantile", cv, n_trials, timeout, config)
40
        self.alpha_ = alpha
41
```