quantlib Documentation

Release 1.0.1

SnowWalkerJ

May 20, 2017

API:

CHAPTER 1

quant.analysis

quant.analysis.ic

IC correlation score

`quant.analysis.ic.get_ic(table1, table2)`

IC score

Parameters **table1, table2: pd.DataFrame**

IC

Returns float

IC

CHAPTER 2

quant.backtest

Get Started

:

```
from quant.backtest.stock.strategy import AbstractStrategy


class SimpleStrategy(AbstractStrategy):
    start_date = "2017-03-01"
    def handle(self, today, universe):
        self.change_position({universe[0]: 0.1})
```

2017310% ‘SimpleStrategy().run()‘

CHAPTER 3

quant.data

quant.data.wind

Functions

quant.data.wind.**get_wind_data**(*table*, *field*, *index=None*, *columns=None*, *parse_dates=True*)

Wind

Parameters table

SQL, ‘quant.data.wind.tables‘

field

index

index

columns

columns

parse_dates: bool, optional

indexdatetime

Returns pd.DataFrame

Tables

AShareEODPrices

class quant.data.wind.tables.**AShareEODPrices**(***kwargs*)

A

Attributes

object_id	
s_info_windcode	eg. 600030.SH
trade_dt	YYYYMMDD
crncy_code	
s_dq_preclose	
s_dq_open	
s_dq_high	
s_dq_low	
s_dq_close	
s_dq_change	
s_dq_pctchange	
s_dq_volume	
s_dq_amount	
s_dq_adjpreclose	
s_dq_adjopen	
s_dq_adjhigh	
s_dq_adjlow	
s_dq_adjclose	
s_dq_adjfactor	
s_dq_avgprice	
s_dq_tradestatus	
sec_id	
opdata	
opmode	

AShareEODDerivativeIndicator

class `quant.data.wind.tables.`**`AShareEODDerivativeIndicator`**`(`***kwargs*`)`

AIndexEODPrices

class `quant.data.wind.tables.`**`AIndexEODPrices`**`(`***kwargs*`)`

A

Attributes

object_id	
s_info_windcode	eg. 600030.SH
trade_dt	YYYYMMDD
crncy_code	
s_dq_preclose	
s_dq_open	
s_dq_high	
s_dq_low	
s_dq_close	
s_dq_change	
s_dq_pctchange	
s_dq_volume	
s_dq_amount	
sec_id	
opdata	
opmode	

AShareIPO

class `quant.data.wind.tables.`**`AShareIPO`**`(`***kwargs*`)`
AIPO

Attributes

object_id	
s_info_windcode	eg. 600030.SH
s_ipo_listdate	, YYYYMMDD

AShareST

class `quant.data.wind.tables.`**`AShareST`**`(`***kwargs*`)`
AST

Attributes

object_id	
s_info_windcode	eg. 600030.SH
s_type_st	ST
entry_dt	ST YYYYMMDD
remove_dt	ST YYYYMMDD
ann_dt	YYYYMMDD

AShareTTMHis

class `quant.data.wind.tables.`**`AShareTTMHis`**`(`***kwargs*`)`

CHAPTER 4

quant.transform

quant.transform.distribution

class `quant.transform.distribution.`**`Transformer`**(*distribution='norm'*)

Methods

`train`(data)	
`transform`(data)	

`quant.transform.distribution.`**`compute_zscore`**(*data*, *axis=-1*, *clip=3.0*, *inplace=False*)

Z

Parameters data

axis: int

features

clip: float, optional

clip

inplace: bool, optional

`quant.transform.distribution.`**`find_extreme_values`**(*data*, *distribution='norm'*, *alpha=0.975*)

alpha

Parameters data: array_like

distribution: str

:

- `norm`
- `expon`
- `uniform`

alpha: float

alpha

Returns pd.Series

`quant.transform.distribution.`**`get_residual`**(*y: pandas.core.series.Series*, *x: pandas.core.series.Series*, *estimate_start=None*, *estimate_end=None*, *remove_alpha=True*)

yx

Parameters y: pd.Series

x: pd.Series

estimate_start: str (YYYY-MM-DD), optional

estimate_end: str (YYYY-MM-DD), optional

remove_alpha: bool, optinal

True

CHAPTER 5

quant.utils

quant.utils

Utils that may be used outside the *quantlib* package

class `quant.utils.`**`LocalizeWrapper`**(*path*)

@localizer.wrap(filename)pandas pd.read_hdf(filename, key)key

Methods

wrap([filename, update, exclude])	

`wrap`(*filename=None*, *update='overwrite'*, *exclude=None*)

Parameters

filename: str, optional

h5

update: {'overwrite', 'append'}, optional

exclude: list, optional

Examples

```
@LOCALIZER.wrap("data")
def get_data(code):
        ...
```

'code''data.h5'

class `quant.utils.ConfigManager`(*path='config.cfg'*)

Methods

add_argument(*args, **kwargs)	'argparse.ArgumentParser.add_argument'
items()	
keys()	
update()	

add_argument(**args, **kwargs*)
'argparse.ArgumentParser.add_argument'

items()

keys()

update()

quant.utils.calendar

class `quant.utils.calendar.TradingCalendar`

Attributes

TradingDay	pd.tseries.offsets.CustomBusinessDay
holidays	

Methods

get_holidays()

TradingDay
pd.tseries.offsets.CustomBusinessDay

static get_holidays()

holidays
type: List[str]

CHAPTER 6

Indices and tables

- genindex
- modindex
- search

Python Module Index

q

Index