

# Package ‘TradeStrategyVisualizer’

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**Type** Package

**Title** Trade Strategy Visualizer

**Version** 1.0

**Date** 2011-03-12

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**Description** Visualizes different trading strategies on market data

**License** GPL (>= 2)

**Depends** DBI, RSQLite, stats, googleVis, RJSONIO, ggplot2

**LazyLoad** yes

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TradeStrategyVisualizer-package  
*Trade Strategy Visualizer*

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## Description

This package contains a trade simulator and a collection of trading strategies

## Details

Package:	TradeStrategyVisualizer
Type:	Package
Version:	1.0
Date:	2011-03-12
License:	GPL (>= 2)
LazyLoad:	yes

## Author(s)

Tirto Adji

## References

Wickham, Hadley (2009) ggplot2 Chambers, J. (2008) Software for Data Analysis

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calcSumHoldings      *Calculates Summary of Portfolio Holdings*

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## Description

Aggregates all of stocks value in portfolio holdings group by portfolio ID

## Usage

```
calcSumHoldings(histMarketData, holdingsData)
```

## Arguments

histMarketData	Historical Market Data
holdingsData	Portfolio Holding Data

**Examples**

```
## see demo.R
```

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calendarHeatMap	<i>Plots Calendar Heat Map</i>
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**Description**

Plots Calendar Heat Map of a stock from our portfolio DB or from web services

**Usage**

```
calendarHeatMap(mData, ticker, startdate = "2009-08-21", enddate = "2010-08-20")
```

**Arguments**

mData	Market Data
ticker	Ticker symbol
startdate	start date
enddate	end date

**Author(s)**

Tirto Adjti

**References**

Wickham, Hadley (2009) ggplot2 Chambers, J. (2008) Software for Data Analysis

**Examples**

```
## see demo.R
```

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gvisAnnotatedTimeLine2

*modified version of gvisAnnotatedTimeLine2*


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## Description

has all of the functionalities of gvisAnnotatedTimeLine, plus optional chart title and description args and fixes to javascript api location

## Usage

```
gvisAnnotatedTimeLine2 (data,
                        datevar="",
                        numvar="",
                        idvar="",
                        titlevar="",
                        annotationvar="",
                        date.format="%Y/%m/%d",
                        options = list(),
                        chartid,
                        charttitle="",
                        chartdesc="")
```

## Arguments

data	a data.frame. The data has to have at least two columns, one with date information (datevar) and one numerical variable.
datevar	column name of data which shows the date dimension.
numvar	column name of data which shows the values to be displayed
idvar	column name of data which identifies different groups of the data.
titlevar	column name of data which shows the title of the annotations.
annotationvar	column name of data which shows the annotation text.
date.format	specifies how the dates are reformatted to be used by JavaScript.
options	list of configuration options for Google Annotated Time Line.
chartid	character. If missing (default) a random chart id will be generated
charttitle	character. can be HTML snippets
chartdesc	character. can be HTML snippets

## References

<http://code.google.com/apis/visualization/documentation/gallery/motionchart.html>

**See Also**

gvisAnnotatedTimeLine

**Examples**

```
# see demo.R
```

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gvisMotionChart2     *modified version of gvisMotionChart*

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**Description**

has all of the functionalities of gvisMotionChart, plus optional chart title and description args

**Usage**

```
gvisMotionChart2(data,
                  idvar="id",
                  timevar="time",
                  date.format="%Y/%m/%d",
                  options = list(),
                  chartid,
                  charttitle="",
                  chartdesc="")
```

**Arguments**

data	a data.frame. The data has to have at least four columns with subject name (idvar), time (timevar) and two columns of numeric values. Further columns, numeric and character/factor are optional. The combination of idvar and timevar has to describe a unique row.
idvar	column name of data with the subject to be analysed.
timevar	column name of data which shows the time dimension.
date.format	specifies how the dates are reformatted to be used by JavaScript.
options	list of configuration options for Google Motion Chart.
chartid	character. If missing (default) a random chart id will be generated
charttitle	character. can be HTML snippets
chartdesc	character. can be HTML snippets

**References**

<http://code.google.com/apis/visualization/documentation/gallery/motionchart.html>

See Also

gvisMotionChart

Examples

## see demo.R

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portfolioBoxPlot	<i>Plots Stock Prices Box Plot</i>
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Description

Plots Stock Prices Box Plot in our portfolio from low to high prices to identify outliers

Usage

portfolioBoxPlot(mData, tData)

Arguments

mData	Market Data
tData	Transaction Data

References

Wickham, Hadley (2009) ggplot2 Chambers, J. (2008) Software for Data Analysis

Examples

## see demo.R

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portfolioHoldingSummaryChart	<i>Plots Portfolio Holding Summary Chart</i>
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Description

Compares performance of algorithms used in determining trade strategy in different portfolio holdings

Usage

portfolioHoldingSummaryChart(hData, pData, xrng = NULL, yrng = NULL, caption = NULL)

### Arguments

<code>hData</code>	Historical Stock Market Data
<code>pData</code>	Portfolio Data
<code>xrng, yrng, caption</code>	optional argument of x, y range and caption

### Author(s)

Tirto Adji

### References

Wickham, Hadley (2009) ggplot2 Chambers, J. (2008) Software for Data Analysis

### Examples

```
## see demo.R
```

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`portfolioStocksChart`  
*Plots Portfolio Stocks Chart*

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### Description

Compares performance of different stock prices in our portfolio

### Usage

```
portfolioStocksChart(data)
```

### Arguments

<code>data</code>	Portfolio Data
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### Author(s)

Tirto Adji

### References

Wickham, Hadley (2009) ggplot2 Chambers, J. (2008) Software for Data Analysis

### Examples

```
# see demo.R
```

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readFromDB	<i>Reads data from sqlite table</i>
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**Description**

Reads data from sqlite table into a data frame

**Usage**

```
readFromDB(tablename, where = "")
```

**Arguments**

tablename	Table name
where	SQL where clause

**Examples**

```
## see demo.R
```

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stockCorrMatrixChart	<i>Plots stock correlation matrix chart</i>
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**Description**

This function initialize and plots stock prices that are highly correlated

**Usage**

```
stockCorrMatrixChart(data)
```

**Arguments**

data	Correlation matrix data
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**Author(s)**

Tirto Adji

**Examples**

```
## see demo.R
```



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`stockCorrPairsCartesianChart`*Plots stock correlation cartesian chart*

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**Description**

This function initializes and plots stock prices that are highly correlated

**Usage**

```
stockCorrPairsCartesianChart (sMarketData, corrData)
```

**Arguments**

<code>sMarketData</code>	Stock Market Data
<code>corrData</code>	Correlation matrix data

**Author(s)**

Tirto Adjti

**Examples**

```
## see demo.R
```

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`writeToDb`*Writes data to sqlite table*

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**Description**

Generic function to write data to a sqlite table

**Usage**

```
writeToDb(tablename, df)
```

**Arguments**

<code>tablename</code>	Table name
<code>df</code>	Data frame

**Examples**

```
## see demo.R
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