# **Cadet Toolbox documentation**

1. Toolbox name: R\_CADET\_MACD

Sub-operators: read data CMACD; CADET\_MACD

CMACD: For reading input file.

CADET\_MACD PARAMETERS: (From R-Script)

-*function(nslow,nfast,nsignal)*

*Where, nslow=****12****; nfast=****26****; nsignal=****9***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CADET\_MACD | nslow | nfast | nsignal | version |
| 1 | 12 | 26 | 9 | 09/30/2016 |
|  |  |  |  |  |
|  |  |  |  |  |

1. Toolbox name: R\_TTR\_CMF

Sub-operators: read data TTR\_CMF; TTR\_CMF

Read data TTR\_CMF: For reading input file.

TTR\_CMF: (from R-Script)

*-cmf20 <- CMF(data[,c("high","low","close")], data[,"volume"],n=20)*

***n=20***

1. Toolbox name: R\_TTR\_KST

Sub-operators: read data TTR\_KST; TTR\_KST

read data TTR\_KST: For reading input file.

TTR\_kst: (from R-Script)

-*kst9 <- KST(data[,"close"], n = c(10,10,10,15), nROC = c(10,15,20,30), nSig = 9)* **[Vector]**

***n=10,10,10,15***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| R\_TTR\_KST | n | nROC | nSig | version |
| 1 | c(10,10,10,15) | c(10,15,20,30) | 9 | 09/30/2016 |
|  |  |  |  |  |
|  |  |  |  |  |

1. Toolbox name: R\_TTR\_ChaikinVolatility

Sub-operators: read data TTR\_ChaikinVolatility; TTR\_ChaikinVolatility

read data TTR\_ChaikinVolatility: For reading input file.

TTR\_ChaikinVolatility: (from R-Script)

-*vt10 <- chaikinVolatility(data[,c("high","low")], n= 10)*

***n=10***

1. Toolbox name: R\_TTR\_MACD

Sub-operators: read data TTR\_MACD, TTR\_MACD

Read data TTR\_MACD: For reading input file

TTR\_MACD: (from R-script)

-*no implementation of Fibonacci series in the method.*

1. Toolbox name: R\_CADET\_KST\_Smooth

Sub-operators: read data TTR\_KST\_MA, TTR\_KST\_MA

read data TTR\_KST\_MA: For reading input file

TTR\_KST\_MA: (from R-script)

*-kst9 <- KST(data[,"close"],n = c(10,10,10,15), nROC = c(10,15,20,30), nSig = 9, maType=list(list(SMA),list(EMA),list(DEMA),list(WMA)))* **[Vector]**

**n=10,10,10,15**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| R\_CADET\_KST\_Smooth | n | nROC | nSig | version |
| 1 | c(10,10,10,15) | c(10,15,20,30) | 9 | 09/30/2016 |
|  |  |  |  |  |
|  |  |  |  |  |

1. Toolbox name: R\_TTR\_ChaikinAD

Sub-operators: read data TTR\_ChaikinAD, TTR\_ChaikinAD

read data TTR\_ChaikinAD: For reading input file

TTR\_ChaikinAD: (from R-script)

- *no implementation of Fibonacci series in the method.*

1. Toolbox name: R\_TTR\_SMI

Sub-operators: read data TTR\_SMI, TTR\_SMI

read data TTR\_SMI: For reading input file

TTR\_SMI: (from R-script)

- *smi1 <- SMI(data[,c("high","low","close")], n = 13, nFast = 2, nSlow = 25, nSig = 9, maType=list(list(SMA), list(EMA, wilder=TRUE), list(SMA)))*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| R\_TTR\_SMI | nslow | nfast | nsignal | n | version |
| 1 | 25 | 2 | 9 | 13 | 09/30/2016 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

1. Toolbox name: R\_RSI\_TTR

Sub-operators: read data RSI TTR, R\_RSI\_TTR

read data RSI TTR: For reading input file

R\_RSI\_TTR: (from R-script)

-***n= 3,5,8,13,21,34***

|  |  |  |
| --- | --- | --- |
| R\_RSI\_TTR | RSIvalues | RSIvalues  Version Date |
| 1 | 3 | 9/30/2016 |
| 2 | 5 | 9/30/2016 |
| 3 | 8 | 9/30/2016 |
| 4 | 13 | 9/30/2016 |
| 5 | 21 | 9/30/2016 |
| 6 | 34 | 9/30/2016 |
|  |  |  |
|  |  |  |

1. Toolbox name: R\_CADET\_RSI\_Sentiment

Sub-operators: read data CADETRSI, R\_RSI\_CADET

read CADETRSI: For reading input file

R\_RSI\_CADET: (from R-script)

**n= 3,5,8,13,21,34**

|  |  |  |
| --- | --- | --- |
| R\_CADET\_RSI\_Sentiment | RSIvalues | RSIvalues  Version  Date |
| 1 | 3 | 9/30/2016 |
| 2 | 5 | 9/30/2016 |
| 3 | 8 | 9/30/2016 |
| 4 | 13 | 9/30/2016 |
| 5 | 21 | 9/30/2016 |
| 6 | 34 | 9/30/2016 |

1. Toolbox name: R\_HMA\_TTR\_CADET

Sub-operators: Execute R (2), Execute R (3)

Execute R (2): For reading input file

Execute R (3): (from R-script)

**n= 3,5,8,13,21**

|  |  |  |
| --- | --- | --- |
| Execute R (3) | HMA(n) | HMA(n)  Version  Date |
| 1 | 3 | 9/30/2016 |
| 2 | 5 | 9/30/2016 |
| 3 | 8 | 9/30/2016 |
| 4 | 13 | 9/30/2016 |
| 5 | 21 | 9/30/2016 |

1. Toolbox name: R\_RSI\_EMA

Sub-operators: data read RSI EMA, R\_RSI\_EMA (2)

data read RSI EMA: For reading input file

R\_RSI\_EMA: (from R-script)

**n= 3,5,8,13,21,34**

|  |  |  |
| --- | --- | --- |
| R\_RSI\_EMA | rsiema(n) | rsiema(n)  Version  Date |
| 1 | 3 | 9/30/2016 |
| 2 | 5 | 9/30/2016 |
| 3 | 8 | 9/30/2016 |
| 4 | 13 | 9/30/2016 |
| 5 | 21 | 9/30/2016 |
| 6 | 34 | 9/30/2016 |

1. Toolbox name: R\_RSI\_WMA

Sub-operators: data read RSI WMA, R\_RSI\_WMA (2)

data read RSI WMA: For reading input file

R\_RSI\_WMA: (from R-script)

**n= 3,5,8,13,21,34**

|  |  |  |
| --- | --- | --- |
| R\_RSI\_WMA(2) | rsiwma(n) | rsiwma(n)  Version  Date |
| 1 | 3 | 9/30/2016 |
| 2 | 5 | 9/30/2016 |
| 3 | 8 | 9/30/2016 |
| 4 | 13 | 9/30/2016 |
| 5 | 21 | 9/30/2016 |
| 6 | 34 | 9/30/2016 |

1. Toolbox name: R\_Money Flow Index

Sub-operators: Read data MFI, MFI

Read data MFI: For reading input file

MFI: (from R-script)

**n= 3,5,8,13,21,34**

|  |  |  |
| --- | --- | --- |
| MFI | mfi(n) | mfi(n)  Version  Date |
| 1 | 3 | 9/30/2016 |
| 2 | 5 | 9/30/2016 |
| 3 | 8 | 9/30/2016 |
| 4 | 13 | 9/30/2016 |
| 5 | 21 | 9/30/2016 |
| 6 | 34 | 9/30/2016 |

1. Toolbox name: R\_EMA\_TTR

Sub-operators: read data EMA TTR, R\_EMA

Read data EMA TTR: For reading input file

R\_EMA: (from R-script)

**n= 3,5,8,13,21,34**

|  |  |  |
| --- | --- | --- |
| R\_EMA\_TTR | EMA(n) | EMA(n)  Version  Date |
| 1 | 3 | 9/30/2016 |
| 2 | 5 | 9/30/2016 |
| 3 | 8 | 9/30/2016 |
| 4 | 13 | 9/30/2016 |
| 5 | 21 | 9/30/2016 |
| 6 | 34 | 9/30/2016 |

1. Toolbox name: R\_SMA\_TTR

Sub-operators: read data SMA TTR, R Moving Averages

Read data SMA TTR: For reading input file

R Moving Averages: (from R-script)

**n= 3,5,8,13,21,34**

|  |  |  |
| --- | --- | --- |
| R\_SMA\_TTR | sma{n) | sma(n)  Version  Date |
| 1 | 3 | 9/30/2016 |
| 2 | 5 | 9/30/2016 |
| 3 | 8 | 9/30/2016 |
| 4 | 13 | 9/30/2016 |
| 5 | 21 | 9/30/2016 |
| 6 | 34 | 9/30/2016 |

1. Toolbox name: R\_WMA\_TTR

Sub-operators: read data WMA TTR, R Moving Averages

Read data WMA TTR: For reading input file

R Moving Averages: (from R-script)

**n= 3,5,8,13,21,34**

|  |  |  |
| --- | --- | --- |
| R\_WMA\_TTR | WMA(n) | WMA(n)  Version  Date |
| 1 | 3 | 9/30/2016 |
| 2 | 5 | 9/30/2016 |
| 3 | 8 | 9/30/2016 |
| 4 | 13 | 9/30/2016 |
| 5 | 21 | 9/30/2016 |
| 6 | 34 | 9/30/2016 |

1. Toolbox name: R\_DEMA\_TTR

Sub-operators: Execute R (10), Execute R

Execute R (10): For reading input file

Execute R: (from R-script)

**n= 3,5,8,13,21,34**

|  |  |  |
| --- | --- | --- |
| R\_DEMA\_TTR | dema(n) | dema(n)  Version  Date |
| 1 | 3 | 9/30/2016 |
| 2 | 5 | 9/30/2016 |
| 3 | 8 | 9/30/2016 |
| 4 | 13 | 9/30/2016 |
| 5 | 21 | 9/30/2016 |
| 6 | 34 | 9/30/2016 |

1. Toolbox name: R\_ZLEMA\_TTR

Sub-operators: Execute R (11), Execute R (12)

Execute R (11): For reading input file

Execute R (12): (from R-script)

**n= 3,5,8,13,21,34**

|  |  |  |
| --- | --- | --- |
| R\_ZLEMA\_TTR | zl(n) | zl(n)  Version  Date |
| 1 | 3 | 9/30/2016 |
| 2 | 5 | 9/30/2016 |
| 3 | 8 | 9/30/2016 |
| 4 | 13 | 9/30/2016 |
| 5 | 21 | 9/30/2016 |
| 6 | 34 | 9/30/2016 |

1. Toolbox name: R\_BollingerBands

Sub-operators: read data BBands (2), R\_BBands (2)

read data BBands (2): For reading input file

R\_BBands (2): (from R-script)

|  |  |  |  |
| --- | --- | --- | --- |
| R\_BollingerBands | bbands  (1)  n=10 | bbands  (2)  n=20 | version |
| 1 | sd=1, sd=2 | sd=1, sd=2 | 09/30/2016 |



For each of the n and SD combinations shown above, the following four column are generated

* BB\_Up
* BB\_Down
* BB\_AVG
* BB\_Signal

BB\_Down / BB\_UP

1. Toolbox name: R\_Shift

Sub-operators: read data lead or lag, Shift Function

read data lead or lag: For reading input file

Shift Function: (from R-script)

|  |  |  |
| --- | --- | --- |
| R\_Shift | usevar(n) | usevar(n)  Version  Date |
| 1 (data for lag) | -1 | 09/30/2016 |
| 2 | -2 | 09/30/2016 |
| 3 | -3 | 09/30/2016 |
| 4 | -4 | 09/30/2016 |
| 5 | -5 | 09/30/2016 |
| 6 | 8 | 09/30/2016 |
| 7 | -13 | 09/30/2016 |
| 8 | -21 | 09/30/2016 |
| 9 | -34 | 09/30/2016 |

1. Toolbox name: R\_ADX\_TTR

Sub-operators: read data ADX\_TTR, R\_ADX

Read data ADX\_TTR: For reading input file

R\_ADX: (from R-script)

**n= 3,5,8,13,21,34**

|  |  |  |
| --- | --- | --- |
| ADX\_hilow\_n | ADX(data[,c("high","low","close")],**n**) | ADX(n)  Version  Date |
| 1 | 3 | 10/22/2016 |
| 2 | 5 | 10/22/2016 |
| 3 | 8 | 10/22/2016 |
| 4 | 13 | 10/22/2016 |
| 5 | 21 | 10/22/2016 |
| 6 | 34 | 10/22/2016 |

1. Toolbox name: R\_VHF\_TTR

Sub-operators: read data VHF\_TTR, R\_VHF

Read data VHF\_TTR: For reading input file

R\_VHF: (from R-script)

**n= 3,5,8,13,21,34**

|  |  |  |
| --- | --- | --- |
| VHF\_hilow\_n | VHF(data[,c("high","low","close")],**n**) | VHF(n)  Version  Date |
| 1 | 3 | 10/22/2016 |
| 2 | 5 | 10/22/2016 |
| 3 | 8 | 10/22/2016 |
| 4 | 13 | 10/22/2016 |
| 5 | 21 | 10/22/2016 |
| 6 | 34 | 10/22/2016 |

1. Toolbox name: TrendReversal\_System\_CADET **(NOT UPDATED SINCE IT IS UNDER PROCESS)**

Sub-operators: TrendReversal Operator, Normalize

Read data for Trend Reversal

TrendReversal

Read data for Trend Reversal: For reading input file

TrendReversal: (from R-script)

|  |  |  |  |
| --- | --- | --- | --- |
| TrendReversal | ff1  Version 09/30/2016 | ff2  Version  Dt: 09/30/2016 | usevar(n)  Version  Dt: |
| CADET\_trendrevprefinal | 8, 21, 65 |  |  |
| CADET\_trendrevrp |  | 8, 21, 65 |  |
|  |  |  |  |
|  |  |  |  |