NeuroShell Trader

The Condensed Candlesticks described by David Cline can be easily implemented with a few of NeuroShell Trader's over 800 indicators and Advanced Indicator Set #2. Simply select 'New Indicator …' from the 'Insert' menu and use the Indicator Wizard to create the following indicators:

    RangeMultiplier: Min2(1,Avg Ratio (Sub(High,Low), 10))
    HO: Round(Multiply3(Divide(Sub(High,Open),Sub(High,Low)), RangeMultiplier, SegmentCount))
    HC: Round(Multiply3(Divide(Sub(High,Close),Sub(High,Low)), RangeMultiplier, SegmentCount))
    HL: Round(Multiply3(Divide(Sub(Open,Low),Sub(High,Low)), RangeMultiplier, SegmentCount))
    Candle Signature: Add3(HO, HC, HL)

Neural networks provide a more robust analysis of historical patterns than the segmented statistical analysis described in the article, so we chose to use the condensed candlesticks as inputs to a neural network. To create a neural network that analyzes and trades based upon the past three condensed candlestick HO, HC and HL values, simply select 'New Prediction …" from the 'Insert' menu and use the Prediction Wizard to create the following prediction inputs.

Non-rounded HO	Lag(Non-rounded HO,1)	Lag(Non-rounded HO,2)
Non-rounded HC	Lag(Non-rounded HC,1)	Lag(Non-rounded HC,2)
Non-rounded HL	Lag(Non-rounded HL,1)	Lag(Non-rounded HL,2)

Since neural networks analysis also does not require grouping into integers as does the segmented statistical analysis, non-rounded versions of the indicators were used as inputs. Using 6 years of monthly bars for training and holding out an additional 6 years for out of sample evaluation, a quickly constructed non-optimized prediction gave an average yearly return of 13.5% over the out of sample period for AAPL, ADBE and ADP. NeuroShell Trader also allows you to choose whether or not the parameters should be optimized. After backtesting the prediction, use the 'Prediction Analysis …' button to view the backtest and trade-by-trade statistics for the strategy.

Users of NeuroShell Trader can go to the STOCKS & COMMODITIES section of the NeuroShell Trader free technical support Website to download a copy of any of the traders' tips.

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Figure 1: A NeuroShell Trader chart showing the Condensed Candlestick Neural Network trading results.

NeuroShell DayTrader Professional - [Condensed CandleSticks.cht]

File Edit View Insert Format Drawing Tools Window Help

Symbol AAPL   Name Apple Computer Inc   Frequency Monthly Bars

Trades: Predicted 1 bar %Change in Open

SystemEquity(Trades: Predicted 1 bar %Change ...

HO

HC

OL

11/30/2014	Open	High	Low	Close	Trades: Predicted 1 bar	SystemEquity(Trades:	HO	HC	OI
AAPL	118.99	119.25	109.35	114.15		60,934.16	5.0	0.0	0.0
ADBE	73.58	74.0	70.68	71.58	Cover Short & Buy Long	47,033.01	3.0	0.0	0.0
ADP	85.18	86.5	84.36	85.24		19,442.85	5.0	1.0	0.0

6/30/2013   0.0