

- Making a Dataset with SMA and other Indicator values. ✓
- Must use $\sqrt{x^2 + y^2}$ to capture the difference between each price and must include that row to the dataset. ✓
- And must put up or down the target column. ✓
- Datasheet must shift one row back to make value predict the future method. ✓
- And use the data set to predict going up or down using different parameters and different algorithms. } on
- Compare the Accuracy of each model.
- And use valid models with valid indicators to predict prices.
- Making a Neural Network to predict the risk of the prediction of the selected price point.
- Use a Neural Network to predict the risk percentage.

1. Moving Average

2. Average True Range

1. Calculate the ATR for the 5-day period using the information shown below:

Description:	Monday	Tuesday	Wednesday	Thursday	Friday
Current High	\$36	\$39	\$35	\$43	\$37
Current Low	\$34	\$35	\$32	\$36	\$32
Previous Close	\$33	\$36	\$39	\$33	\$39

Mon: $H-L = \$2$ $|H-C_p| = \$3$ $|L-C_p| = \$1$
Tues: $H-L = \$4$ $|H-C_p| = \$3$ $|L-C_p| = \$1$
Wed: $H-L = \$3$ $|H-C_p| = \$4$ $|L-C_p| = \$7$
Thu: $H-L = \$7$ $|H-C_p| = \$10$ $|L-C_p| = \$3$
Fri: $H-L = \$5$ $|H-C_p| = \$2$ $|L-C_p| = \$7$
ATR = $\frac{\$3 + \$4 + \$7 + \$10 + \$7}{5}$

3. Stochastic

The Formula For The Stochastic Oscillator Is

$$\%K = (C - L_{14}) / (H_{14} - L_{14}) \times 100\%$$

where:

C = The most recent closing price

L14 = The lowest price traded of the 14 previous

trading sessions

H14 = The highest price traded during the same

14-day period

%K = The current value of the stochastic indicator

4. Donchian channel

The Formula for Donchian Channels Is:

UC = Highest High in Last N Periods

Middle Channel = $((UC - LC)/2)$

LC = Lowest Low in Last N periods

where:

UC = Upper channel

N = Number of minutes, hours, days, weeks,
months

Period = Minutes, hours, days, weeks, months

LC = Lower channel

How To Calculate Donchian Channels

Channel High:

1. Choose time period (N minutes/hours/days/weeks/months).
2. Compare the high print for each minute, hour, day, week or month over that period.
3. Choose the highest print.
4. Plot the result.

Channel Low:

1. Choose time period (N minutes/hours/days/weeks/months).
2. Compare the low print for each minute, hour, day, week or month over that period.
3. Choose the lowest print.
4. Plot the result.

Center Channel:

1. Choose time period (N minutes/hours/days/weeks/months).
2. Compare high and low prints for each minute, hour, day, week or month over that period.
3. Subtract the highest high print from lowest low print and divide by 2.
4. Plot the result.

5. Relative strength index (RSI)

6. MACD

MACD=12-Period EMA – 26-Period EMA

The Formula for EMA Is

$$EMA_{\text{Today}} = \left(\text{Value}_{\text{Today}} * \left(\frac{\text{Smoothing}}{1 + \text{Days}} \right) \right) + EMA_{\text{Yesterday}} * \left(1 - \left(\frac{\text{Smoothing}}{1 + \text{Days}} \right) \right)$$