Estrategia de Identificación de Patrones de Rechazo y Retroceso en Velas Japonesas

Este documento resume las ideas clave para implementar en Python un sistema de identificación de patrones de rechazo y retroceso en gráficos de velas, basado en el estudio del documento "Candlestick Patterns Encyclopedia". Incluye explicaciones, fórmulas, pseudocódigo y ejemplos visuales extraídos del texto original.

Resumen General

Los patrones de rechazo o retroceso reflejan intentos fallidos de mover el precio, seguidos de un cambio de control entre compradores y vendedores. Los más representativos son: Pin Bars (Hammer / Shooting Star), Doji (Dragonfly, Gravestone), Engulfing, Harami e Inside Bars. Estos patrones son más confiables en zonas de soporte/resistencia y marcos temporales altos (4H o diario).

Ideas de Implementación

Cada patrón se puede detectar midiendo proporciones entre cuerpo y sombras de la vela. El algoritmo compara la longitud de las colas con el rango total de la vela y el tamaño del cuerpo. En Python, se calculan atributos derivados (body, upper_shadow, lower_shadow, range) y se aplican reglas proporcionales.

Filtros de Contexto

Para aumentar la fiabilidad se recomienda combinar la detección de patrones con niveles técnicos relevantes: - Soporte/resistencia estáticos o de Fibonacci (50%-61.8%). - Medias móviles (8/21 EMA). - Contexto direccional (HH/HL o tendencia definida). - Volumen creciente en la vela de rechazo.

Reglas de Entrada y Salida

Entrada agresiva: al cierre de la vela de rechazo. Entrada conservadora: en retroceso del 50% de la vela. Stop-loss: más allá de la sombra extrema o 1-2 ATR. Take-profit: R:R de 1.5 a 3 o siguiente nivel técnico relevante.

Pseudocódigo General

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Ejemplo simplificado de flujo en Python:
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for each candle i:
detect = []
if is_pinbar(candle_i): detect.append('pinbar')
if is_doji(candle_i): detect.append('doji')
if is_engulfing(candle_{i-1}, candle_i): detect.append('engulfing')

near_level = is_near_support_resistance(candle_i, levels, tol_pct=0.5)
near_ma = is_within_pct(candle_i['close'], ma21[i], pct=0.5)
trend = detect_trend(lookback=20)

if 'pinbar' in detect and near_level and trend == 'up':
signal = {'type':'bull_pin', 'time':..., 'stop':..., 'entry':candle_i['close']}
store_signal(signal)
```

Ejemplos Visuales Extraídos del PDF

Trading the engulfing bar with moving averages

Trading the engulfing bar pattern with moving averages provide a very profitable trading strategy, however, the lack of knowledge about using the moving average can damage dramatically your trading account.

Traders use moving averages in different ways:

-As a trend following tool to identify the direction of the trend, so they buy the market when prices are above 200 simple moving average. And they sell the market when it is below the 200 simple moving average

-To determine whether the market is overbought or oversold we just watch how prices interact with the moving averages, for example, in an uptrend, if prices move far from the moving averages, this is an indication that the market is overbought.

-To predict the trend, change by using the crossover strategy, if the moving average crosses over another, it is a signal of a trend reversal.

As any trading system, the moving averages have disadvantages; this is why you have to know how to use it successfully under the right market conditions.

This trading technical tool doesn't apply to all markets, don't never try to use it in range bound or untradeable markets.

Because you will get lot of false signals, and you will definitively blow up your trading account.

To the best of my knowledge, using the moving average as a dynamic support and resistance in trending markets, in combination with an engulfing bar pattern signal is the perfect way to make money in the market.

The strategy is very simple, we will use the 21 and the 8-simple moving averages in the daily and 4-hour time frames, we will define a clear

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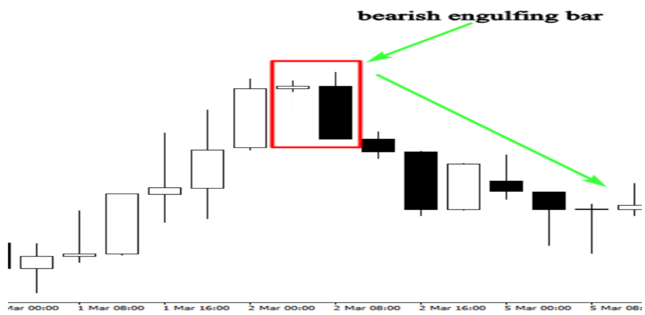
In case of a bearish engulfing bar, this pattern tells us that sellers are in control of the market.

When this pattern occurs at the end of an uptrend, this indicates that buyers are engulfed by sellers which signals a trend reversal.

See the example below:



As you can see when this price action pattern occurs in an uptrend, we can anticipate a trend reversal because buyers are not still in control of the market, and sellers are trying to push the market to go down.

You can't trade any bearish candlestick pattern you find on your chart; you will need other technical tools to confirm your entries.

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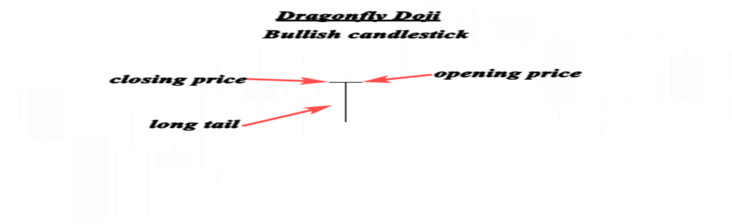
The Dragonfly Doji pattern

The Dragonfly Doji is a bullish candlestick pattern which is formed when the open high and close are the same or about the same price.

What characterizes the dragonfly Doji is the long lower tail that shows the resistance of buyers and their attempt to push the market up.

See the example below:



The illustration above shows us a prefect dragonfly Doji. The long lower tail suggests that the forces of supply and demand are nearing a balance and that the direction of the trend may be nearing a major turning point.

See the example below that indicates a bullish reversal signal created by a dragonfly Doji.

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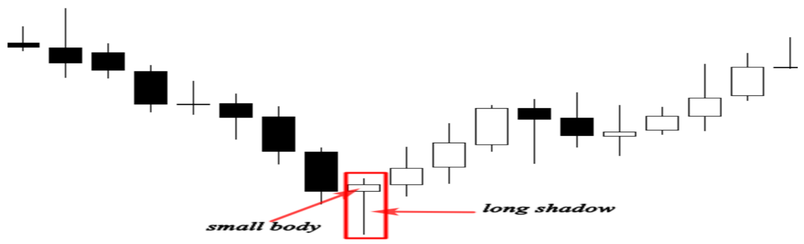
This candle forms when sellers push the market lower after the open, but they get rejected by buyers so the market closes higher than the lowest price.

See another example below:



As you can see the market was trending down, the formation of the hammer (pin bar) was a significant reversal pattern.

The long shadow represents the high buying pressure from this point.

Sellers was trying to push the market lower, but in that level the buying power was more powerful than the selling pressure which results in a trend reversal.

The most important to understand is the psychology behind the formation of this pattern, if you can understand how and why it was

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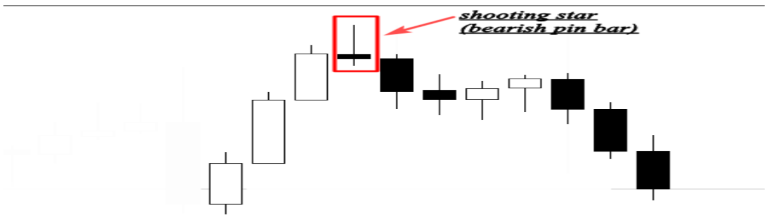
When this candlestick forms near a resistance level. It should be taken as a high probability setup.

See another example below:



The chart above shows a nice shooting star at the end of an uptrend.

The formation of this pattern indicates the end of the uptrend move, and the beginning of a new downtrend.

This candlestick pattern can be used with support and resistance, supply and demand areas, and with technical indicators.

The shooting star is very easy to identify, and it is very profitable, it is one of the most powerful signals that i use to enter the market.

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risk in the same trade, the market will not go in your predicted direction.

If the signal fails, it doesn't mean that your analysis is wrong, or pin bars don't work, it is just because the market didn't validate your decision, therefore, you accept your loss, and you look for another opportunity.

You May ask yourself, why should we look for quality pin bar setups if the market doesn't respect them???

As you know, trading is a game of probabilities, there is no certainty, this is why you should evaluate your pin bar setups from multiple angles, and the fact that you are looking for quality setups means that you are trying to put the probabilities of success in your favor which is the right mindset of successful traders.

To determine whether or not a pin bar is worth trading, this price action signal should respect the following criteria:

-The pin bar formed in bigger time frames such as the 4 hour or daily time frame should be taken into consideration, because if you look at smaller time frames, you can easily spot lot of pin bar signals, these setups should be ignored, because smaller time frames generate lot of false signals. See the illustration below:

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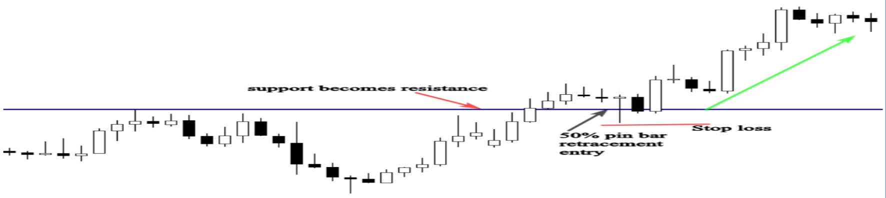

One of the drawbacks of this entry option is that the market sometimes doesn't retrace to 50% of the range bar, which will make you feel frustrated because the market will move to the profit target without you.

There is no wrong or right entry option, the both work great, but with screen time and experience, you will be able to decide whether to trade aggressively or conservatively.

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