

Backtesting Result for demo market making strategy

using the huobi swap BTC-USDT 2021-04-13 data to do the backtesting

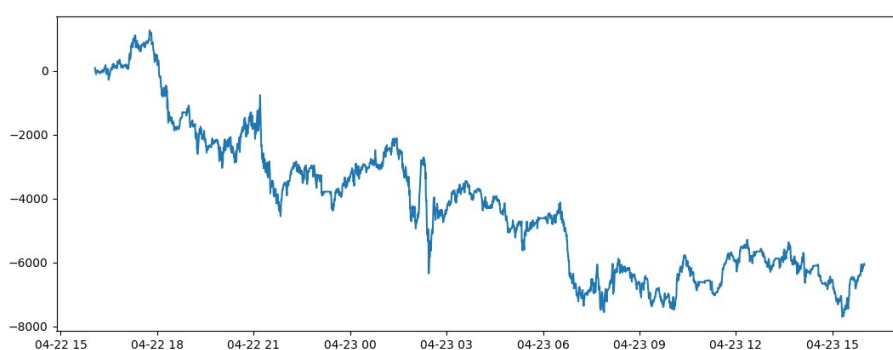
we set the active trade commission as 0.00025 and passive trade commission as -0.0002

benchmark_strategy

set $\text{target_spread} = 0.001$ which $(\text{ShortPrice} - \text{LongPrice}) / \text{market_price} \geq 0.001$, the ShortPrice is your submit price of the sell order and the LongPrice is your submit price of the buy order

backtesting result:

profit	Transactions times
-6040.11	3553

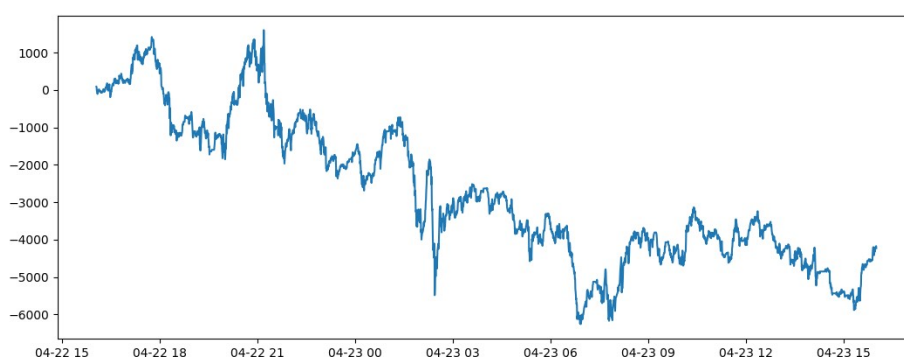


vpin_spread_strategy

set $\text{target_spread} = 0.001 * \max(0, -0.5 + \text{abs}(\text{vpin}))$,

backtesting result:

profit	Transactions times
-4174.38	3303

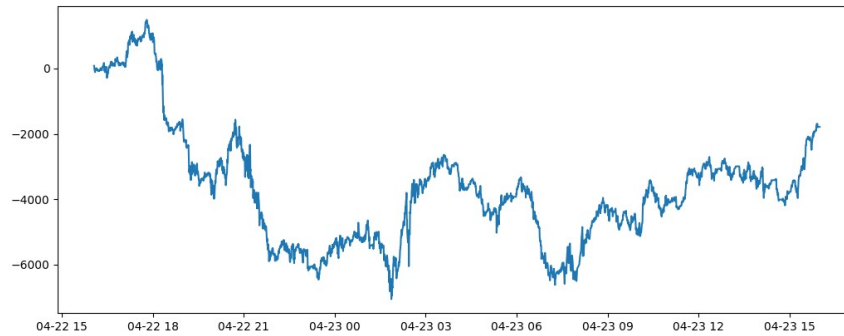


floating_spread_strategy

set $\text{target_spread} = \max(0.001, \text{market_range})$, while market_range is the max marketprice – min marketprice in 10 seconds

backtesting result:

profit	Transactions times
-1784.75	2832



Filter_volume_strategy

set $\text{target_spread} = \max(0.001, \text{market_range})$, while market_range is the max marketprice – min marketprice in 10 seconds

and let $(\text{ask_price} - \text{bid_price}) / \text{market_price} \geq \text{target_spread}$,

subject to $\min_{(i,j)} \text{AccumulateVolume}$,

$$\text{while } \text{AccumulateVolume} = \sum_{j=1}^{\text{LongPrice} > \text{BidPrice}[j]} \text{BidVolume}[j] + \sum_{i=1}^{\text{ShortPrice} > \text{AskPrice}[i]} \text{AskVolume}[i]$$

backtesting result:

profit	Transactions times
14665.5	6373

