Eureka System Design

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Special Terms

ARMST Alamost all level price Reached the Max/min-line Several Times.. 6

best predict the best fit price in the predict line group.. 2

c-shape C_n-shape indicates the channel level where n is sampler id from 0 to 11.. 5

CP(current position) the index of current data in a level, $CP = POS/(down_interval of level)$. 8

current predict the predict line of current price.. 2, 3

hop price the hop from current price to first price. $hop = (price_{now} - price_0)/(unit of this instrument)$.. 8

itop the predict line top point, its max point of convex or min point of concave.. 3

L (level) L_n indicates the sampler level where n from 0 to 11.. 2

max-line the max-line of channel.. 2, 8

min-line the min-line of channel.. 2, 8

p-shape P_n-shape is the shape of predict line, might are convex, concave, up, down and flat. usually, it means shape of best predict line. n is the sampler level from 0 to 11.. 2

Chapter 1

ni888

ni888 since 20150630 to 20171108, 10s candle datas.

1.1 First Big Inflexion

1.1.1 2099200 - 2101600

2099369, 2099407, 2099730, 2100096, 2100204, 2100290, 2100798, 2101140, 2101152, 2101356, 2101600

Table 1.1: KeyPoints of ni. Part 1

Trading Position	Reason	Shot Position	Reserved 1	Reserved 2
2099369	the best predict had a different P-shape with current predict	2099264		
2099407	the p-shape was changed from convex to concave	2099264		
2099730	price higher than max-line	2099712		
2100096	跌 破L0-5,L11的min-line, 接近L5的顶点	2100096		
2100204	L0预测线形状改变，接近L5的顶点,L6与L5相反	2100096		
2100290	L1平，L3L5接近顶点	2100096		
2100762	突破L0-L4, L6max-line, L2, L3, L5, L7, L8顶点	2100752		
2100798	L0形状改变, best回退, 与current相差很大, 到达L0L1 顶点	2100768		
2101140	L2,L3,L6 reached the max-line	2100798		
2101152	L (level)0 changed the P-shape	2101152		
2101344	L1,2,3 reached min-line	2101344		check the gap of top and cp at L0
2101356	L0,1,2,3 reached min-line	2101344		
2101600	L0,1,2 reached max-line	2101600		it is not old shot

We got those issues:

1. The best-P had a different P-shape with current predict (2099369)

2. Best-P go back and got a gap with current predict (2100798)
3. Price reached the max/min-lines then change the P-shape, often occurred at L0.
4. Check the gap of current position and itop

1.1.2 2101600 - 2103504

2101749, 2101874, 2101984, 2102251, 2102367, 2102717, 2102746, 2103000, 2103175, 2103188, 2103210, 2103240, 2103323, 2103356, 2103402

Table 1.2: KeyPoints of ni. Part 2

Trading Position	Reason	Shot Position	Reserved 1	Reserved 2
2101749	L0,1,2,6,7 reached max-line	2101749		
2101874	reached L0,1,2,3,4 min-line	2101874, 2101856		
2101984	L0 changed P-shape	2101874	L4,5 was flat shape	
2102182	L0-4 reached max-line	2101856 2101874 2101984		
2102251	L0 changed p-shape	2102182 2101984		
2102367	L0,1 reached min-line but L2 did not			the lowest price in the middle of L2 channel because statistics
2102717	L0,1,3,6,7,8(?) reached max-line			L5 p-shape was flat
2102746	L0 changed p-shape	2102717		
2103000	L0 changed p-shape after L0 reached the min-line	2102832 2102864		
2103175	L0,1 reached the max-line			
2103188	L0 changed p-shape	2103200(?)		
2103210	L0,1,2,3 reached min-line	2103200		
2103240	L0,1,2 reached max-line	2103232		
2103323	L0-5 reached min-line	2103296		
2103356	L0,1 reached max-line	2013352		L0 p-shape changed to up
2103402	L0 p-shape changed to convex	2103356		

We got those issues:

1. How to deal with the current shot and previous shot?
2. Do I need remember the Highest or Lowest price?

3. The max/min-lines were unstable that will changed by new price, but the several previous shots was more suitable for the new price.

4. Might, sometime, the channel was very broad than lower channel, so I can draw a previous level channel in current level.

5. If price changed violently might cause the price seesawed between max-min lines without p-shape-change.

6. 2103440, 2103504 two shots, should we keep the "good channel" one?

1.1.3 2103504 - 2105968

2103522, 2103535, 2103552, 2103566, 2103688, 2103695, 2104066, 2104174, 2104355, 2104350, 2104332, 2104591, 2104695, 2105126

Table 1.3: KeyPoints of ni. Part 3

Trading Position	Reason	Shot Position	Reserved 1	Reserved 2
2103523	L0-4,6 reached max-line	2103504		
2103535	L0 changed p-shape	2103504 2103440(?)		
2103552	L0 changed p-shape to up but not convex	2103535, 2103504		
2103566	L0 changed p-shape to concave	2103552, 2103535		
2103578	L0-4 reached min-line			
2103655	L0 itop is the 2nd lowest point	2103578		
2103688	L0 reached the itop of 2103655	2103655		
2103695	L0 changed p-shape after it had reached min-line			
2104066	L0 reached max-line	2104038, 2104066		
2104174	L0 changed p-shape	2104066, 2104038		
2104335	L0 changed p-shape after had reached min-line			but L2 was stay at near max-line
2104350	waiting for L0 will go up or down	2104335		
2104332	L0 changed p-shape after had reached max-line	2104372		
2104591	reached almost all min-lines	2104592, 2104488		
2104695	reached L0-4 max-lines	2104658		
2105126	L0 changed p-shape after reached max-line	2105000		

We got those issues:

1. 2103535, 2103552, 2103566. It was changed L0 p-shape 3 times.

2. if price reached the min/max lines without change p-shape it maybe will reached the

2nd lowest/highest point, after price had reached first lowest/highest point.(2103655, 2103688)

3. nearer shot is more important(?)

1.1.4 2105968 - 2107739

2105968, 2106030, 2106180, 2106282, 2106400, 2107088, 2107102, 2107350, 2107360, 2107440, 2107475, 2107600, 2107616, 2107658, 2107739

Table 1.4: KeyPoints of ni. Part 4

Trading Position	Reason	Shot Position	Reserved 1	Reserved 2
2105968	almost all level reached the min-lines	2105968		
2106030	almost all level reached the min-lines	2106030, 2105968		
2106180	L0 p-shape was changed to convex	2106030, 2105968		
2106210	L0 reached min-line but did not change the p-shape	2106208		
2106282	L0-4 reached max-line	2106282, 2106210		
2106400	L0 reached min-line, and the channel changed dir			
2107088	L0 changed p-shape to concave and itop aligned minimum point	2107088		
2107102	L0-2 reached minimum point	2107088		
2107350	L0 p-shape was changed	2107350, 2107232		
2107360	c-shape $C_{0,1}$-shape was changed to up	2107360		
2107440	$C_{0,1,2}$-shape was changed to up	2107440		$P_{1,3}$-shape changed to convex $P_{2,4}$-shape changed to up
2107475	$P_{2,4}$ changed to convex	2107440		
2107600	C_3-shape was changed to up	2107600		
2107616	P_5-shape changed to up	2107616		
2107658	L_{0-8} reached max-line	2107658		
2107739	P_0-shape changed to down	2107658		

Table 1.4: KeyPoints of ni. Part 4

Trading Position	Reason	Shot Position	Reserved 1	Reserved 2

We got those issues:

1. How to decide the main dir after almost level reached min/max-line several times (ARMST)?
2. L0-3 reached the min-line after ARMST

1.1.5 Inflexion

Table 1.5: KeyPoints of ni. Part 5

Trading Position	Reason	Shot Position	Reserved 1	Reserved 2

We got those issues:

1.

Chapter 2

rb888

2.1 Going Up

2.1.1 2099200

Table 2.1: KeyPoints of rb. Part 1

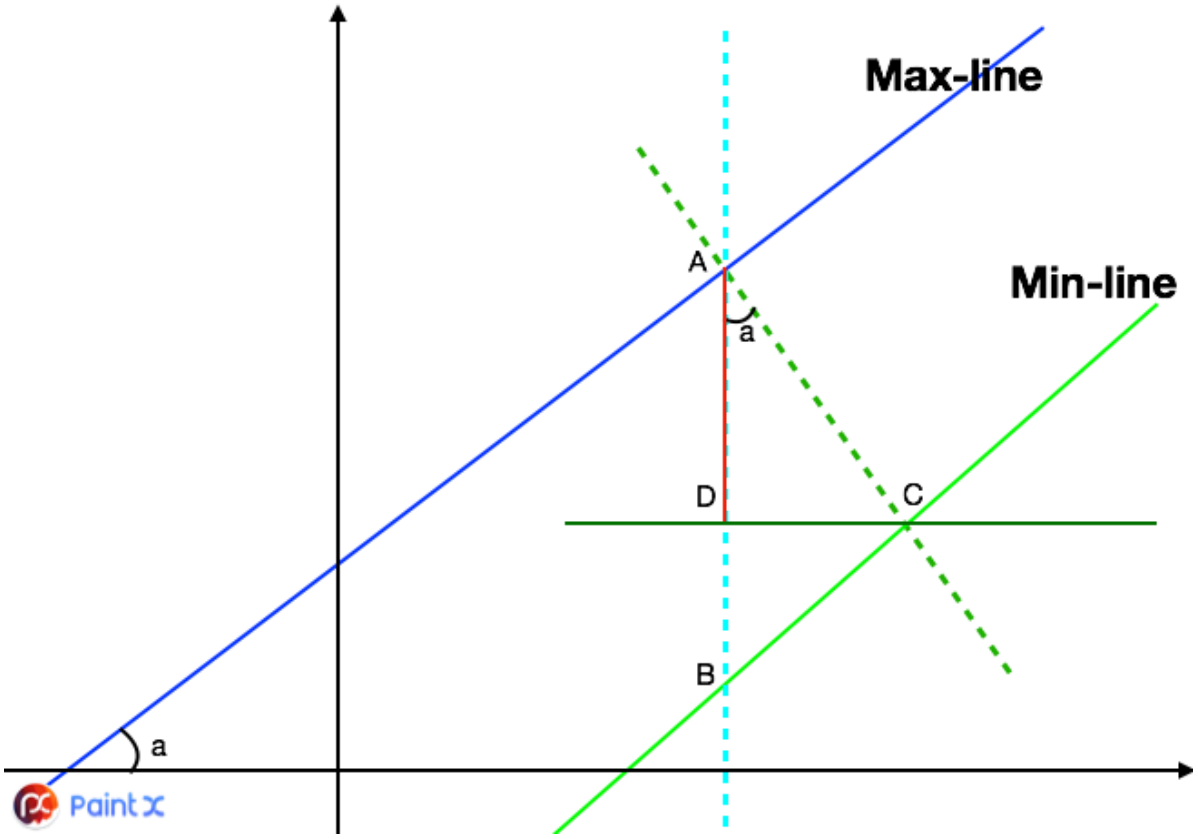
Trading Position	Reason	Shot Position	Reserved 1	Reserved 2

Chapter 3

Eureka Diagram System

3.1 Channel Lines

3.1.1 Distance between max-line and min-line



To find AD, we know the max-line has slope k_{max} and min-line has slope k_{min}, $AC \perp Max - line$, $AD \perp CD$, the equation of max-line is

$$y = k_{max}x + y_{max0} \tag{3.1}$$

the euation of min-line is

$$y = k_{min}x + y_{min0} \tag{3.2}$$

And x of A is CP(current position), y of A is current hop price, thus $A(cp, hop_{now})$, and slope of AC is

$$k_{AC} = -\frac{1}{k_{max}} \tag{3.3}$$

So, let

$$y_0 = hop_{now} - k_{AC} \times cp \tag{3.4}$$

then equation of AC is

$$y = k_{AC}(x - cp) + hop_{now} = k_{AC}x + hop_{now} - k_{AC} \times cp = k_{AC}x + y_0 \tag{3.5}$$

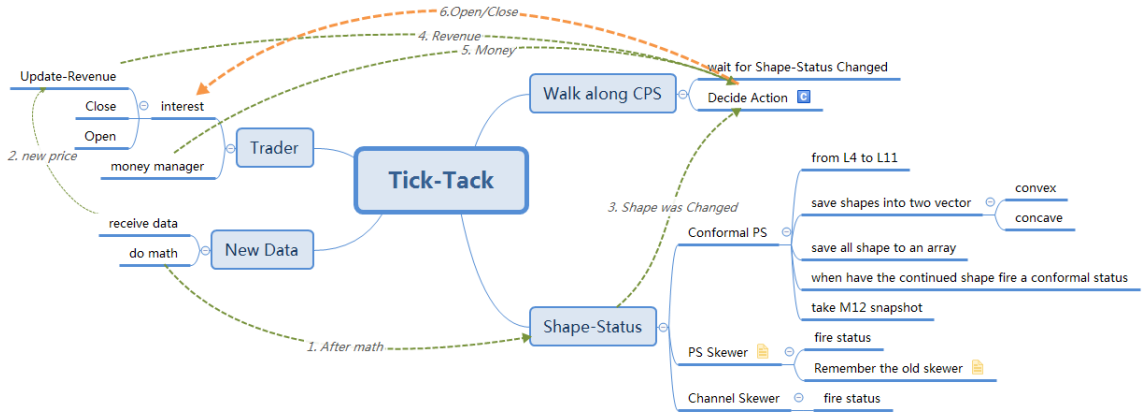
The intersection [1] of AC and min-lin is

$$P(\frac{y_0 - y_{min0}}{k_{min} - k_{AC}}, \frac{k_{min}y_0 - k_{AC}y_{min0}}{k_{min} - k_{AC}}) \tag{3.6}$$

Chapter 4

Tick-Tack Framework

4.1 Tick-Tack



Bibliography

[1] Wikipedia. *Line-line intersection*. URL: https://en.wikipedia.org/wiki/Line%E2%80%93line_intersection. (accessed: 01.23.2018).

List of source codes

List of Tables