
算法 1 计算奖励权重比例

输入: *AttentionWeight* 模型注意力层权重, *Xdata* 博弈数据, *actionCount* 落子动作的数量

输出: 奖励权重比例

```

1: function GETACTIONINDEX(XStep, actionCount)
2:   startIndex  $\leftarrow$  768
3:   endIndex  $\leftarrow$  startIndex + actionCount - 1
4:   return  $\arg \max(XStep[startIndex : endIndex])$ 
5: end function
6:
7: function GETREWARDWEIGHT(AttentionWeight, XData)
8:   attributions  $\leftarrow$  [0, 0, 0, ..., 0]
9:   actionsFreq  $\leftarrow$  [0, 0, 0, ..., 0]
10:  stepCount  $\leftarrow$  len(AttentionWeight)
11:  for i = 0  $\rightarrow$  stepCount do
12:    stepList  $\leftarrow$  AttentionWeight[i]
13:    contributionCount  $\leftarrow$  len(stepList)
14:    for j = 0  $\rightarrow$  contributionCount do
15:      actionIndex  $\leftarrow$  GETACTIONINDEX(XData[i][j], actionCount)
16:      stepContribution  $\leftarrow$  stepList[j]
17:      attributions[actionIndex]  $\leftarrow$  attributions[actionIndex] + stepContribution
18:      actionFreq[actionIndex]  $\leftarrow$  actionFreq[actionIndex] + 1
19:    end for
20:  end for
21:  result  $\leftarrow$  attributions/actionsFreq
22:  return result
23: end function

```
