TCG 2017 Homework2 result

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January 4, 2018

Grade

$$
\begin{aligned}
\mathit{raw\_score}() &= 1 \times \mathit{format}() \\
&+ (1/4) \times \mathit{vs\_randomgo99\_score}() \\
&+ 1 \times \mathit{report}() \\
&+ 4 \times \mathit{UCB\_correct}() \\
&+ 4 \times \mathit{UCT\_correct}() \\
&+ 2 \times \mathit{PP\_correct}() \\
&+ 2 \times \mathit{SHOWPV\_correct}()
\end{aligned}
$$

$$\mathit{score}() = \mathit{raw\_score}() \times 0.9^{\mathit{late}}$$

format

$$format() = \begin{cases} 0, & \text{if report is not pdf} \\ 0, & \text{if your code is not in a folder named code} \\ 0, & \text{the executable file compiled} \\ & \text{from makefile is not your student id} \\ 1, & \text{otherwise} \end{cases}$$

vs_randomgo99_score

*vs_randomgo*99*_score*() = result of two games vs randomgo99 via gtp

- program does not talk gtp will get 0.
- win = 2, draw = 1, lose = 0
- *vs_randomgo*99*_score*() $\in [0, 4]$

Grade:UCB

$$UCB\_correct() = \begin{cases} 1, & \text{if you use one of UCB formula in} \\ & \text{the slide to compare nodes.} \\ 0, & \text{otherwise} \end{cases}$$

1. Writing a function name UCB but not using it does not count.

Grade:UCT

$$UCT\_correct() = \begin{cases} 1, & \text{if you implement UCT correctly.} \\ 0, & \text{otherwise} \end{cases}$$

1. Some only consider 2 layer from root. The correct algorithm may expand more than three layers.
2. Some choose next selection node among all leaves. The correct algorithm only compare UCB between siblings.
3. Some only do one S-E-S-B each move.

Grade:PP

$$PP\_correct() = \begin{cases} 1, & \text{if you implement PP correctly.} \\ 0, & \text{otherwise} \end{cases}$$

1. Some says PP will worsen the program but they do not tell me how to add it back. Thus I can not test it and trust it.
2. Some do not use formula in slide to prune. For example, prune by winrate without considering variance.
3. Set the pruned flag in nodes to true but do not use this flag.

Grade:SHOWPV

$$SHOWPV\_correct() = \begin{cases} 1, & \text{if you show a PV} \\ & \text{after each genmove correctly.} \\ 0, & \text{otherwise} \end{cases}$$

1. Some print all pv during each iteration of S-E-S-B, it still count.
2. Some only show one move, it does not count.
3. Some show the game history tree, it does not count.

Tournament Info

1. 26 student programs and randomgo99. Each program played 26×2 games.
2. There are 3 programs which violate the rules or crash most of the time.
3. There is 1 program which always passes.
4. win $+2$ draw $+1$ lose $+0$

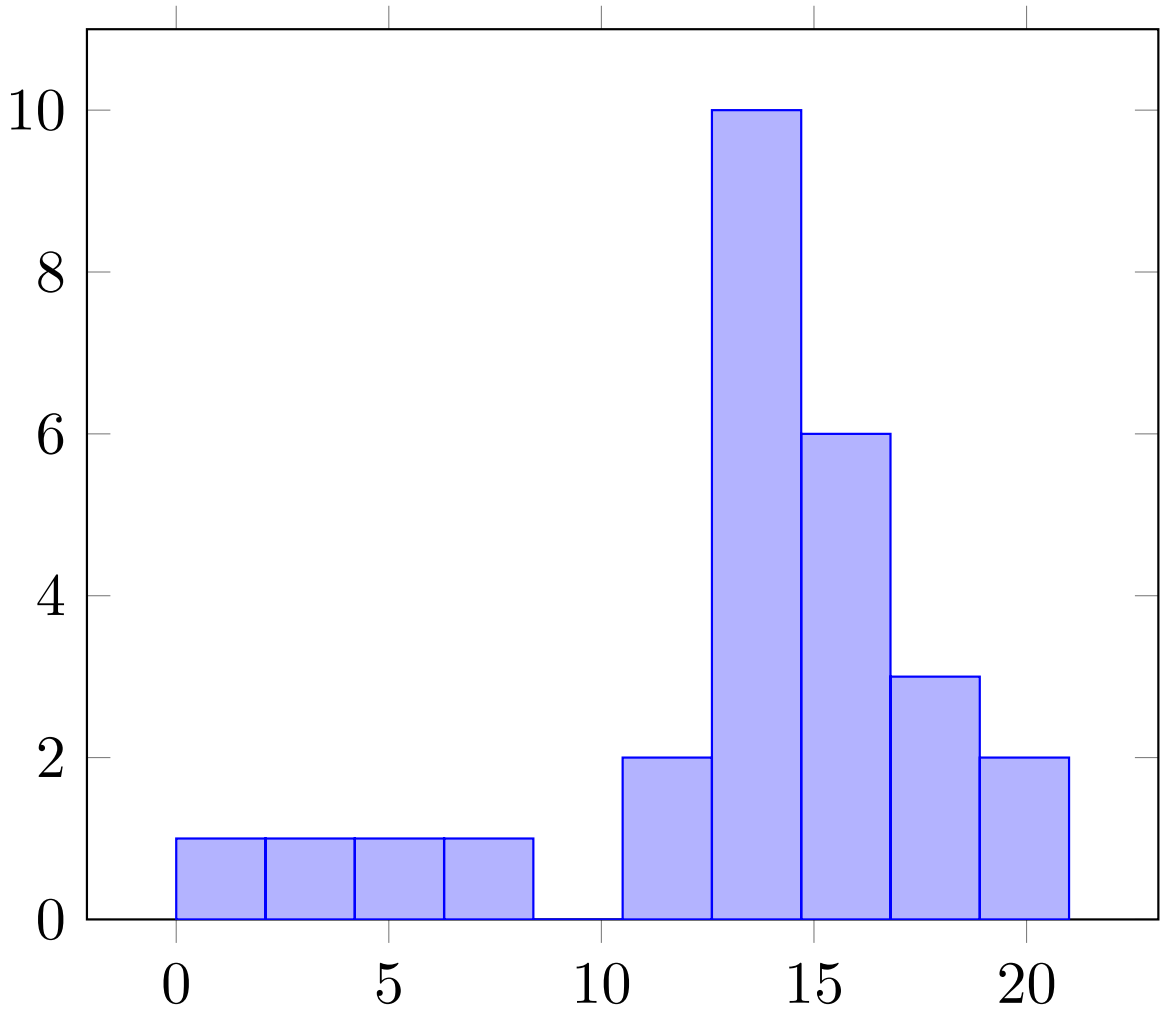
Tournament Result

rank	sid	score
1	R05922092	100
2	B04705006	94
3	M10602107	88
4	R06944035	87
5	R05922074	84
6	B04902029	82
6	R06922057	82
8	R06922023	78
9	R05922032	67
10	R05922107	64

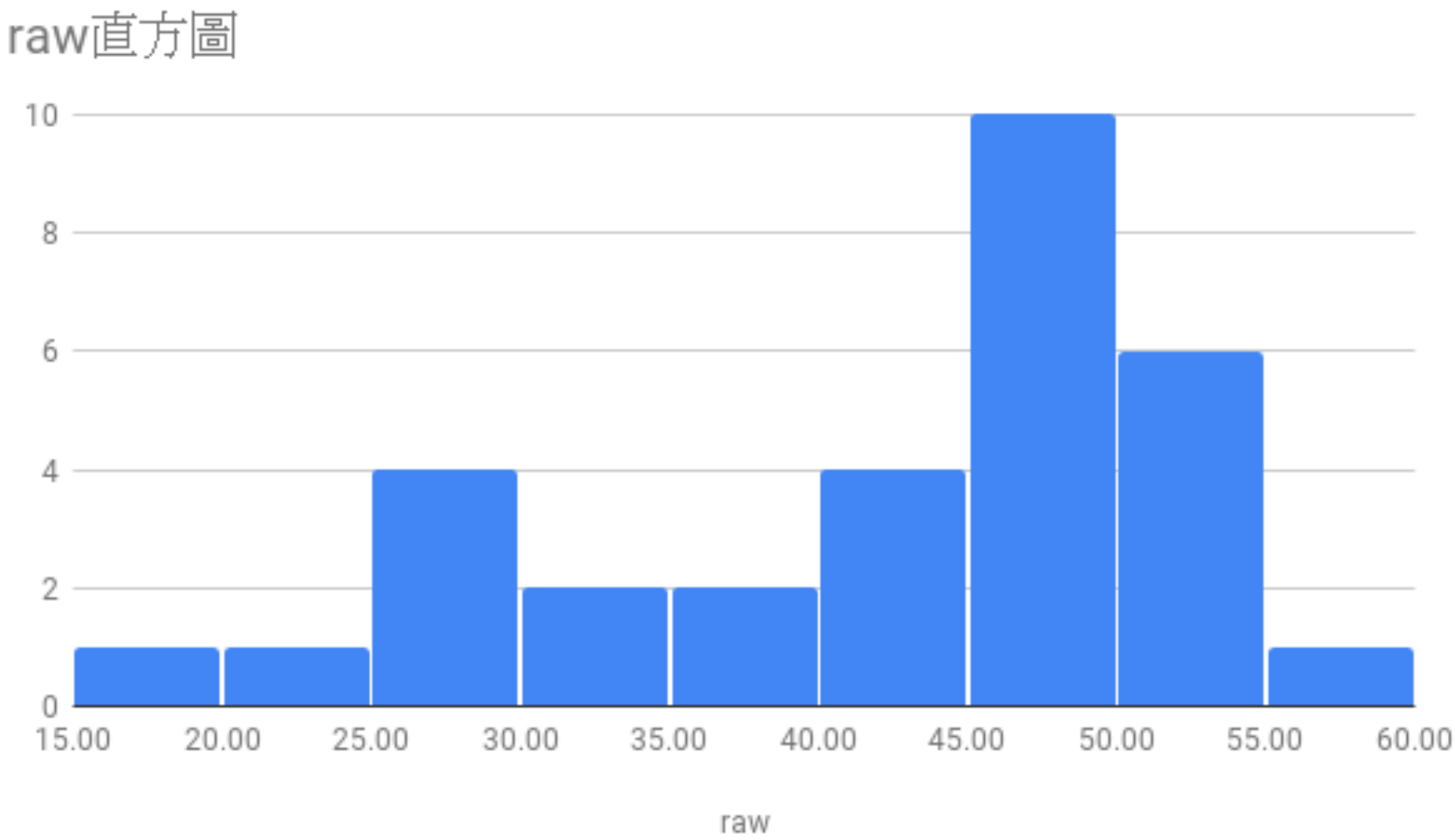
rank	Bonus()
$[1, 1]$	5
$[2, 2]$	4
$[3, 4]$	3
$[5, 8]$	2
$[9, 10]$	1
$[11, 27]$	0

`http://www.csie.ntu.edu.tw/~tcg/2017/tcg2017HW2_vslog.zip` for more.

Raw Score Distribution



目前總成績分佈


raw直方圖
10
8
6
4
2
0
15.00
20.00
25.00
30.00
35.00
40.00
45.00
50.00
55.00
60.00
raw