

MORETHANFIVE WINS CONNECT6 TOURNAMENT

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The computer Connect6 tournament was held as part of the 15th Computer Olympiad, which took place in Kanazawa, Japan, from September 25th to 26th, 2010. Six teams participated in the Connect6 tournament. Table 1 lists the participants and the final standings.

Program	Author	Ranking	Pts	Playouts
MORETHANFIVE	Jiajia Guo, Xiaomeng Yang, Liang Yunzhao, and Jianbo Zhao	1	10	
KAVALON	Jung-Kuei Yang, Shi-Jim Yen, and Shun-Chin Hsu	2	6	3
BITCONNECT6	Fan Hao, Xiaowei Hu, and Haiying Liu	3	6	2
ANT	Shun-Shii Lin and Yun-Ching Liu	4	6	1
CRAZY6	Tadaki Higushi	5	2	
MAKEIT6	Jan Krabbenbos	6	0	

Table 1: The participants and final standings.

The game Connect6, a kind of six-in-a-row game, was first introduced by Wu and Huang (2005) and then described in more detail by Wu, Huang, and Chang (2006). The rules of Connect6 are very simple. Two players, henceforth represented as B (designated as the first player) and W, alternately place two stones, Black and White respectively, on one empty intersection of an 19×19 board, except for that B places one stone initially. The player who first obtains six consecutive stones (horizontally, vertically or diagonally) wins the game. When all intersections on the board are occupied without connecting six, the game draws. In the tournament, the games were played according to a round-robin system in which one program played twice against all the other programs. In each game, every program had to complete all of its moves in 30 minutes. For each game, the winner scored 2 points and the loser scored nothing. For a draw, both scored 1.

Program	MORETHANFIVE	KAVALON	BITCONNECT6	ANT	CRAZY6	MAKEIT6
MORETHANFIVE	-	2	2	2	2	2
KAVALON	0	-	1	1	2	2
BITCONNECT6	0	1	-	1	2	2
ANT	0	1	1	-	2	2
CRAZY6	0	0	0	0	-	2
MAKEIT6	0	0	0	0	0	-

Table 2: The cross table.

Program	KAVALON	BITCONNECT6	ANT
KAVALON	-	1	2
BITCONNECT6	1	-	1
ANT	0	1	-

Table 3: The cross table of the playoff.

MORETHANFIVE won the gold of the 15th Computer Olympiad by winning all games with 10 points. The next three teams, KAVALON, BITCONNECT6, and ANT, tied together with 6 points. The cross table is listed in Table 2. During the playoff shown in Table 3, KAVALON won 3 points and the silver, while BITCONNECT6 won 2 points and the bronze.

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This report comments the three games, two between MORETHANFIVE (the gold) and BITCONNECT6 (the bronze), and one between KAVALON (the silver) and BITCONNECT6. In the first game, BITCONNECT6 (B) vs. MORETHANFIVE (W) is shown in Figure 1; the initial 5 moves are a common opening. Actually, MORETHANFIVE made a losing move at 12. However, BITCONNECT6 did not find the winning move. According to NCTU6, the program developed by the team led by Wu (2008, 2010), the winning move should be played at H6 and L9. After Move 15, BITCONNECT6 had no winning moves and therefore needed to defend, instead of attacking. However, BITCONNECT6 still kept making attacking moves, like Moves 15, 17 and 19, that helped grow the potential of the opponent. Although Move 19 has a live three, BITCONNECT6 was losing. In the second game, MORETHANFIVE (B) vs. BITCONNECT6 (W) shown in Figure 2, both used the same opening as the first game. Yet, Move 6 was incorrect. MORETHANFIVE was able to win by Move 7 and 9. This has also been verified by NCTU6. In the third game, BITCONNECT6 (B) vs. KAVALON (W) is shown in Figure 3, both used a different opening. BITCONNECT6 actually had several times to win the game, but did not find them. For example, there are winning moves at Moves 5, 9 and 13, according to NCTU6. At last, BITCONNECT6 made a clear blunder at Move 13, and hence KAVALON caught the chance to win.

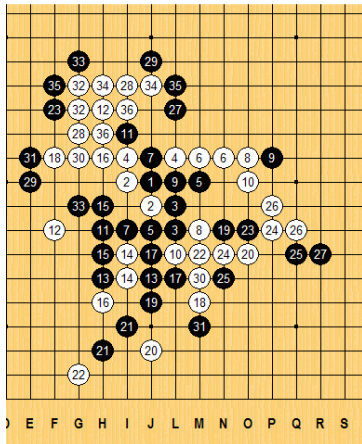


Figure 1: Black: BITCONNECT6, White: MORETHANFIVE, Moves 1 – 36.

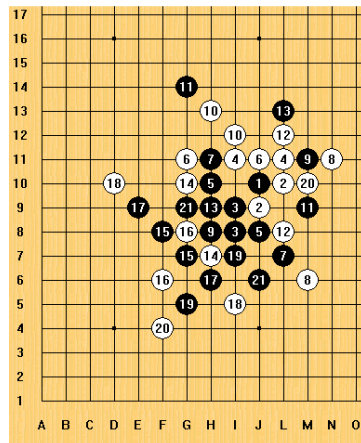


Figure 2: Black: MORETHANFIVE, White: BITCONNECT6, Moves 1 – 21.

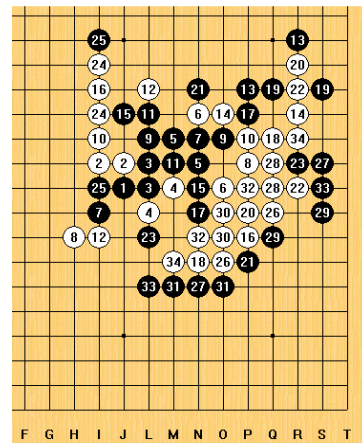


Figure 3: Black: BITCONNECT6, White: KAVALON, Moves 1 – 34.



F.I.t.r. H.J. van den Herik, KAVALON, I-Chen Wu, J.W. Hellemons, MORETHANFIVE and BITCONNECT6.

References

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