

Journal Papers (J)

(only SCI Journals are listed.)

1. An-Jen Liu, Ti-Rong Wu, *I-Chen Wu*, Hung Guei, Tinghan Wei, "Strength Adjustment and Assessment for MCTS-Based Programs", accepted by IEEE Computational Intelligence Magazine, 2020.
2. Chen-Huan Pi, Kai-Chun Hu, Stone Cheng, *I-Chen Wu*, "Low-level autonomous control and tracking of quadrotor using reinforcement learning," accepted by Control Engineering Practice, 2019.
3. Jr-Chang Chen, Wen-Jie Tseng, *I-Chen Wu*, Tinghan Wei, "Comparison Training for Computer Chinese Chess," accepted by the IEEE Transactions on Games, 2019.
4. C.-H. Hsueh and I-C. Wu, "EWIN wins EinStein Würfelt Nicht! tournament", ICGA Journal, Vol. 41, No. 1, March 2019.
5. Ti-Rong Wu, *I-Chen Wu*, Guan-Wun Chen, Ting-han Wei, Tung-Yi Lai, Hung-Chun Wu, Li-Cheng Lan, Multi-Labelled Value Networks for Computer Go, the IEEE Transactions on Games, Vol. 11, No. 4, pp 378-389, December 2018.
6. *I-Chen Wu*, Chang-Shing Lee, Yuandong Tian, and Martin Muller, Special Issue on Deep/Reinforcement Learning and Games, the IEEE Transactions on Games, Vol. 11, No. 4, pp 333-335, December 2018.
7. Chung-Chin Shih, An-Jen. Liu and I-Chen Wu, "2017 CITIC Securities Cup – The 1st World AI Go Open", ICGA Journal, Vol. 40, No. 4, December 2018.
8. J. Wang, T. Zhu, H. Li, C. H. Hsueh, and *I-Chen Wu*, Belief-state Monte-Carlo Tree Search for Phantom Go, the IEEE Transactions on Games, Vol. 10, No. 2, pp 139-154, June 2018.
9. Hsueh, C. H., *I-Chen Wu*, Hsu, T. S., & Chen Jr, C. An investigation of strength analysis metrics for game-playing programs: A case study in Chinese dark chess. ICGA Journal, Vol. 40, No. 2, June 2018.
10. Wen-Jie Tseng, Jr-Chang Chen, *I-Chen Wu*, Chimo wins Chinese chess tournament. ICGA Journal, Vol. 40, No. 2, June 2018.
11. Kun-Hao Yeh, *I-Chen Wu*, Chu-Hsuan Hsueh, Chia-Chuan Chang, Chao-Chin Liang, and Han Chiang, Multi-Stage Temporal Difference Learning for 2048-like Games, IEEE Transactions on Computational Intelligence and AI in Games, Vol. 10, No. 4, pp 369-380, December 2017.

12. W.-J. Tseng, Jr-Chang Chen, *I-Chen Wu*, "DarkKnight Wins Chinese Dark Chess Tournament", ICGA Journal, Vol. 39(2), 163-165, June 2017.
13. J. Wang, C. Xiao, T. Zhu, C. H. Hsueh, W. J. Tseng, and *I-Chen Wu*, ONLY-ONE-VICTOR Pattern Learning in Computer Go, IEEE Transactions on Computational Intelligence and AI in Games, Vol. 9, No. 1, pp 88-102, 2017.
14. C. S. Lee, M. H. Wang, S. J. Yen, T. H. Wei, *I-Chen Wu*, P. C. Chou, C. H. Chou, M. W. Wang, and T. H. Yang, "Human vs. computer Go: review and prospect," IEEE Computational Intelligence Magazine, Vol. 11, No. 3, pp. 67-72, Aug. 2016.
15. Chu-Hsuan Hsueh, *I-Chen Wu*, Wen-Jie Tseng, Shi-Jim Yen, and Jr-Chang Chen, An Analysis for Strength Improvement of an MCTS-Based Program Playing Chinese Dark Chess, Theoretical Computer Science, Vol. 644, Issue C, pp. 63-75, 2016.
16. Ting-han Wei, and *I-Chen Wu*, A Special Issue on Job-level Computing, ICGA Journal, Vol. 37(3), September 2015.
17. Ting-han Wei, Chao-Chin Liang, *I-Chen Wu*, and Lung-Pin Chen, Software Development Architecture for Job-Level Algorithms, ICGA Journal, Vol. 37(3), September 2015.
18. Xi Liang, Ting-han Wei, and *I-Chen Wu*, Solving Hex Openings Using Job-Level UCT Search, ICGA Journal, Vol. 37(3), September 2015.
19. Ting-han Wei, *I-Chen Wu*, Chao-Chin Liang, Bing-Tsung Chiang, Wen-Jie Tseng, Shi-Jim Yen, and Chang-Shing Lee, Job-Level Algorithms for Connect6 Opening Book Construction, ICGA Journal, Vol. 37(3), September 2015.
20. Shi-Jim Yen, Cheng-Wei Chou, Jr-Chang Chen, *I-Chen Wu*, and Kuo-Yuan Kao, "Design and Implementation of Chinese Dark Chess Programs," IEEE Transactions on Computational Intelligence and AI in Games, Vol. 7, No. 1, pp. 66-79, March 2015.
21. Jr-Chang Chen, *I-Chen Wu*, Wen-Jie Tseng, Bo-Han Lin, and Chia-Hui Chang, "Job-Level Alpha-Beta Search", IEEE Transactions on Computational Intelligence and AI in Games, Vol. 7, No. 1, pp. 28-38, March 2015.
22. Yi-Chang Shan, Ching-Hsuan Wei, Cheng-Hung Lin, *I-Chen Wu*, Li-Kai Chuang, and Shi-Jie Tang, "A Framework for Computer Mahjong Competitions", ICGA Journal, Vol. 37(1), pp. 44-56, March 2014.
23. Kun-Hao Yeh, Chao-Chin Liang, Kuang-Che Wu, and *I-Chen Wu*, 2048-Bot Tournament in Taiwan, ICGA Journal, Vol. 37(3), September 2014.
24. Kuo-Yuan Kao, *I-Chen Wu*, S.-J. Yen, and Yi-Chang Shan, "Incentive Learning in Monte Carlo Tree Search", the IEEE Transactions on Computational Intelligence and AI in Games, Vol.5, No. 4, pp. 346-352, December 2013.

25. I-Chen Wu, Der-Johng Sun, Lung-Ping Chen , Kan-Yueh Chen, Ching-Hua Kuo, Hao-Hua Kang, Hung-Hsuan Lin, "An Efficient Approach to Solving Nonograms", the IEEE Transactions on Computational Intelligence and AI in Games, Vol.5, No. 3, pp. 251-264, September 2013.
26. Hung-Hsuan Lin, I-Chen Wu, Ting-Han Wei, "On Specific 17-clue Sudoku Puzzles", ICGA Journal, Vol. 36(3), pp. 131-138, September 2013.
27. T.-H. Wei, W.-J. Tseng, I-Chen Wu, S.-J. Yen, "MOBILE 6 Wins Connect6 Tournament", ICGA Journal, Vol. 36(3), September 2013.
28. W.-J. Tseng, L.-K. Chuang, I-Chen Wu, S.-S. Lin and S.-J. Yen, "LONGCAT Wins Mahjong Tournament", ICGA Journal, Vol. 36(3), September 2013.
29. W.-J. Tseng, Jr-C. Chen, P. She, I-Chen Wu, "HAPPYNOGO Wins NOGO Tournament", ICGA Journal, Vol. 36(3), September 2013.
30. I-Chen Wu, Hung-Hsuan Lin, Der-Johng Sun, Kuo-Yuan Kao, Ping-Hung Lin, Yi-Chih Chan, and Po-Ting Chen, "Job-Level Proof Number Search", the IEEE Transactions on Computational Intelligence and AI in Games, Vol. 5, No. 1, pp. 44-56, March 2013.
31. Hamido Fujita and I-Chen Wu, "A special issue on artificial intelligence in computer games: AICG", Knowledge-Based Systems, Volume 34, October 2012.
32. Kuo-Yuan Kao, I-Chen Wu, and Yi-Chang Shan, "XT Domineering: A New Combinatorial Game", Knowledge-Based Systems, Volume 34, pp. 55-63, October 2012.
33. Kuo-Yuan Kao, I-Chen Wu, Yi-Chang Shan, and Shi-Jim Yen, "Selection Search for Mean and Temperature of Multi-Branch Combinatorial Games", ICGA Journal, Vol. 35, No. 3, pp. 157-176, Sep. 2012.
34. D.-J. Sun, K.-C. Wu, I-Chen Wu, S.-J. Yen, and K.-Y. Kao, "Nonogram Tournaments in TAAI 2011", ICGA Journal, June. 2012.
35. Yi-Chang Shan, I-Chen Wu, Hung-Hsuan Lin, and Kuo-Yuan Kao, "Solving Nine Layer Triangular Nim", Journal of Information Science and Engineering, vol.28, No.1, pp.99-113, January, 2012.
36. Hung-Hsuan Lin, I-Chen Wu, "An Efficient Approach to Solving the Minimum Sudoku Problem", ICGA Journal, vol. 34(4), pp. 191-208, December 2011.
37. I-Chen Wu, Yi-Chang Shan, Cheng-Hung Lin and Shi-Jim Yen, "LONGCATMJ Wins in Mahjong Tournament 2011", ICGA Journal, vol. 34(3), September 2011.
38. Sheng-Hao Chiang, I-Chen Wu, Ping-Hung Lin, "Drawn K-In-A-Row Games", Theoretical Computer Science, Vol. 412, No. 35, pp. 4558-4569, August 2011.

39. I-Chen Wu, Yi-Shan Lin, Hsin-Ti Tsai and Ping-Hung Lin, "The Man-Machine Connect6 Championship 2011", ICGA Journal, vol. 34, no. 2, June 2011.
40. Shi-Jim Yen, Tsang-Cheng Su and I-Chen Wu, "The TCGA 2011 Computer-Games Tournament", ICGA Journal, vol. 34, no. 2, June 2011.
41. Hung-Hsuan, Lin, Der-Johng Sun, I-Chen Wu and Shi-Jim Yen, "The 2010 TAAI Computer-Game Tournaments", ICGA Journal, vol. 34, no. 1, March 2011.
42. I-Chen Wu, Der-Johng Sun and Shi-Jim Yen, "Happynuri Wins Nurikabe Tournament", ICGA Journal, vol. 33, no. 4, December 2010.
43. I-Chen Wu and Ping-Hung Lin, "Relevance-Zone-Oriented Proof Search for Connect6", the IEEE Transactions on Computational Intelligence and AI in Games, Vol. 2, No. 3, pp. 191-207, September 2010.
44. Lung-Pin Chen, I-Chen Wu, William Chu, Jhen-You Hong, and Meng-Yuan Ho, "Incremental Digital Content Object Delivering in Distributed Systems", IEICE Transactions on Information and Systems, Vol. E93-D, No. 6, pp. 1512-1520, June 2010.
45. Ping-Hung Lin and I-Chen Wu, "NCTU6 Wins in the Man-Machine Connect6 Championship 2009", ICGA Journal, vol. 32(4), 2009.
46. Yi-Hsien Wang and I-Chen Wu, "Achieving High and Consistent Rendering Performance of Java AWT/Swing on Multiple Platforms", Software Practice and Experience, Vol. 39, No. 7, pp 701-736, 2009.
47. Jui-Yuan Su, Der-Johng Sun, I-Chen Wu, and Lung-Pin Chen, "On Design of Browser-Oriented Data Extraction System and the Plug-ins", Journal of Marine Science and Technology, April, 2009.
48. Jui-Yuan Su, Lung-Pin Chen, and I-Chen Wu, "A Loosely Coupled Interactive Web Data Extraction System", Journal of Internet Technology, June, 2009.
49. I-Chen Wu and Ping-Hung, Lin, "NCTU6-Lite Wins Connect6 Tournament", ICGA Journal, Vol.31, No.4, December 2008.
50. Yi-Hsien Wang, I-Chen Wu, and Jyh-Yaw Jiang, "A Portable AWT/Swing Architecture for Java Game Development", Software Practice and Experience, Vol. 37, No. 7, pp727-745, 2007.
51. I-Chen Wu and Shi-Jim, Yen, "NCTU6 Wins Connect6 Tournament", ICGA Journal, Vol.29, No.3, September 2006.
52. C.-C. Hsu and I-Chen Wu, "An Event-driven Framework for Inter-user Communication Applications", Information and Software Technology 48, pp. 471-483, 2006.

53. I-Chen Wu, Dei-Yen Huang and Hsiu-Chen Chang, "Connect6", ICGA Journal, Vol. 28, No. 4, pp. 235-242, December 2005.
54. I-Chen Wu and C.-C. Hsu, "The Model and Systems for Play-on-table Games", IEICE Trans. INF. & SYST., VOL. E87-D, No. 11, November 2004.
55. Loon-Been Chen and I-Chen Wu, "Detection of Summative Global Predicates", IEICE Trans. INF. & SYST., VOL. E86-D, no. 3, March 2003.
56. Loon-Been Chen and I-Chen Wu, "An Efficient Distributed Online Algorithm to Detect Strong Conjunctive Predicates", IEEE Trans. on Software Engineering, vol. 28, no. 11, pp. 1077-1084, 2002.
57. I-Chen Wu and Loon-Been Chen, "On Detection of Bounded Global Predicates", The Computer Journal, vol. 40, no. 3, pp. 231-237, 1998.
58. Loon-Been Chen and I-Chen Wu, "On the Time Complexity of Minimum and Maximum Global Snapshot Problems," Information Processing Letters, vol. 67, pp. 151-156, 1998.
59. L.G.C. Hamey, J.A. Webb, and I.C.Wu. "An architecture independent programming language for low-level vision". Computer Vision, Graphics, and Image Processing, 48:246-64, 1989.
60. R.S. Wallace, J.A. Webb, and I.C.Wu . "Machine independent image processing: Performance of apply on diverse architectures". Computer Vision, Graphics, and Image Processing, 48:265-76, 1989.
61. F.-C. Lin and I-C. Wu . "Broadcast normalization in systolic design". IEEE Transaction on Computers, 37(11):1428-34, 1988.
62. I-C. Wu . "A fast 1-D serial-parallel systolic multiplier". IEEE Transaction on Computers, 36(10):1243-7, 1987.
63. F.-C. Lin and I-C. Wu . "Area-period tradeoffs for multiplication of rectangular matrices". Journal of Computer and System Sciences, 30:329-42, 1985.

Conference Papers (C)

1. Ti-Rong Wu, Tinghan Wei, *I-Chen Wu*, "Accelerating and Improving AlphaZero Using Population Based Training", the Thirty-Fourth AAAI Conference on Artificial Intelligence (AAAI-20), February 2020. **(Acceptance rate: 1591/7737 ≈ 20.6%)** (Oral Presentation 453/7737 ≈ 5.85%)
2. Tong-Yi Lai, Chu-Hsuan Hsueh, You-Hsuan Lin, Yeong-Jia Roger Chu, Bo-Yang Hsueh and *I-Chen Wu*, "Combining Deep Deterministic Policy Gradient with Cross-Entropy Method," the 2019 Conference on Technologies and Applications of Artificial Intelligence (TAAI 2019), Kaohsiung, Taiwan, November 2019.
3. Wen-Jie Tseng, Jr-Chang Chen and *I-Chen Wu*, "Merging Metrics of Special Rules in Chinese Chess Endgame Databases," the 2019 Conference on Technologies and Applications of Artificial Intelligence (TAAI 2019), Kaohsiung, Taiwan, November 2019.
4. Lung-Pin Chen, *I-Chen Wu* and Yen-Ling Chang, "Reinforcement Learning based Fragment-Aware Scheduling for High Utilization HPC Platforms," the 2019 Conference on Technologies and Applications of Artificial Intelligence (TAAI 2019), Kaohsiung, Taiwan, November 2019.
5. Hsiao-Chung Hsieh, Ti-Rong Wu, Ting-Han Wei, and *I-Chen Wu*, Net2Net Extension for the AlphaGo Zero Algorithm. In the 16th conference on Advances in Computer Games (ACG2019), Macau, China, 2019.
6. Li-Cheng Lan, Wei Li, Tinghan Wei, *I-Chen Wu*, "Multiple Policy Value Monte Carlo Tree Search", the 28th International Joint Conference on Artificial Intelligence (IJCAI-19), Macau, China, August 2019. **(Acceptance rate: 850/4752 = 17.9%)**
7. Hung Guei, Tinghan Wei, *I-Chen Wu*, "Teaching Reinforcement Learning and Computer Games with 2048-Like Games", The 33th Annual Conference of The Japanese Society for Artificial Intelligence (JSAI 2019), Niigata, Japan, June 2019.
8. *I-Chen Wu*, Ti-Rong Wu, An-Jen Liu, Hung Guei, Tinghan Wei, "On Strength Adjustment for MCTS-Based Programs", the Thirty-Third AAAI Conference on Artificial Intelligence (AAAI-19), January 2019. **(Acceptance rate: 1150/7095 = 16.2%)**
9. Bo-Yang Hsueh, Wei Li, *I-Chen Wu*, "Stochastic Gradient Descent with Hyperbolic-Tangent Decay", IEEE Winter Conference on Applications of Computer Vision (WACV 2019), January 2019.
10. Ming-Xu Huang, *I-Chen Wu*, Bo-Yang Hsueh, Tinghan Wei, Pei-Shu Huang, "Visual-Based Parameterized Proximal Policy Optimization", Infer to Control: Workshop on

Probabilistic Reinforcement Learning and Structured Control, in the Thirty-second Annual Conference on Neural Information Processing Systems (NIPS 2018), Decemeber 2018.

11. Chu-Hsuan Hsueh, *I-Chen Wu*, Jr-Chang Chen, Tsan-sheng Hsu, "AlphaZero for a Non-deterministic Game," the 2018 Conference on Technologies and Applications of Artificial Intelligence (TAAI 2018), Taichung, Taiwan, December 2018. **(Best Paper Award)**
12. Chung-Chin Shih, Ting han Wei, Zheng-Yuan Lee, *I-Chen Wu*, "Playing Games with the Job-Level Computation System," the 23rd Game Programming Workshop (GPW-2018), Kanagawa, Japan, November 16-18, 2018.
13. Wen-Jie Tseng, Jr-Chang Chen, *I-Chen Wu*, "Comparison Training of N-Tuple Networks for Chess," the 23rd Game Programming Workshop (GPW-2018), Kanagawa, Japan, November 16-18, 2018.
14. Guei, H., Wei, T. H., and *I-Chen Wu*. Using 2048-like Games as a Pedagogical Tool for Reinforcement Learning. International Conference on Computers and Games (CG2018), New Taipei City, Taiwan, July 2018.
15. Hsu W. Y., Ko C. L., Hsueh C. H., and *I-Chen Wu*. Solving 7,7,5-Game and 8,8,5-Game. International Conference on Computers and Games (CG2018), New Taipei City, Taiwan, July 2018.
16. Yeong-Jia Roger Chu, Yuan-Hao Chen, Chu-Hsuan Hsueh, *I-Chen Wu*, "An Agent That Plays EinStein Wurfelt Nicht!", the 2017 Conference on Technologies and Applications of Artificial Intelligence (TAAI 2017), Taipei, Taiwan, December 2017. (Merit Paper Award)
17. Han Chiang, Ting-Han Wei and *I-Chen Wu*, "Database Caching for Job-Level Computing", the 2016 Conference on Technologies and Applications of Artificial Intelligence (TAAI 2016), Hsinchu, Taiwan, Novemeber 2016.
18. Chia-Chuan Chang, Ting-Han Wei and *I-Chen Wu*, "Job-Level Computing With BOINC Support", the 2016 Conference on Technologies and Applications of Artificial Intelligence (TAAI 2016), Hsinchu, Taiwan, Novemeber 2016.
19. Hung Guei, Tinghan Wei, Jin-Bo Huang, *I-Chen Wu*, "An Empirical Study on Applying Deep Reinforcement Learning to the Game 2048", the Workshop Neural Networks in Games in the International Conference on Computers and Games (CG 2016), Leiden, the Netherlands, June, 2016.
20. Jen-Jai Chou, Chao-Chin Liang, Hung-Chun Wu, *I-Chen Wu*, Tung-Ying Wu, "A new MCTS-based algorithm for multi-objective flexible job shop scheduling problem", the 2015 Conference on Technologies and Applications of Artificial Intelligence (TAAI 2015), Tainan, Taiwan, November 2015.

21. Lung-Pin Chen, *I-Chen Wu*, Geng-Ze Liang, "Enhancing parallel game-tree searches by using idle resources of a high performance render farm", the 2015 Conference on Technologies and Applications of Artificial Intelligence (TAAI 2015), Tainan, Taiwan, November 2015.
22. Po-Ya Kang, *I-Chen Wu*, Chu-Hsuan Hsueh, "Applying heuristic algorithms to portfolio selection problem", the 2015 Conference on Technologies and Applications of Artificial Intelligence (TAAI 2015), Tainan, Taiwan, November 2015.
23. Wang Jiao, Zhu Tan, Li Hongye, Hsueh Chu-Hsuan and *I-Chen Wu*, "Belief-state Monte-Carlo Tree Search for Phantom Games.", 2015 IEEE Conference on Computational Intelligence and Games (CIG), August 2015. **(Best Paper Finalist)**
24. Xi Liang, Tinghan Wei and *I-Chen Wu*, "Job-Level Search for Solving Hex", 2015 IEEE Conference on Computational Intelligence and Games (CIG), August 2015.
25. Marie-Liesse Cauwet, Olivier Teytaud, Tristan Cazenave, Abdallah Saffidine, Shi-Jim Yen, Hua-Min Liang, Hung-Hsuan Lin and *I-Chen Wu*, "Depth, balancing, and limits of the Elo model", 2015 IEEE Conference on Computational Intelligence and Games (CIG), August 2015.
26. Chu-Hsuan Hsueh, *I-Chen Wu*, Wen-Jie Tseng, Shi-Jim Yen, and Jr-Chang Chen, Strength Improvement and Analysis for an MCTS-Based Chinese Dark Chess Program. In the 14th conference on Advances in Computer Games (ACG2015), Leiden, the Netherlands, 2015.
27. Lung-Pin Chen, Mike Kao, *I-Chen Wu*, Ting-Han Wei, "A Design for Multi-Pricing High-Performance Computing System", International Computer Symposium (ICS 2014), Taichung, Taiwan, December 2014.
28. *I-Chen Wu*, Kun-Hao Yeh, Chao-Chin Liang, Chia-Chuan Chang, and Han Chiang, "Multi-stage Temporal Difference Learning for 2048", the 2014 Conference on Technologies and Applications of Artificial Intelligence (TAAI 2014), Taipei, Taiwan, November 2014. **(Best Paper Award)**
29. Shi-Jim Yen, Wei-Liang Chen, Jr-Chang Chen, Shun-Chin Hsu and *I-Chen Wu*, "An Improved Differential Evolution Algorithm with Priority Calculation for Unit Commitment Problem," 2014 IEEE International Conference on Granular Computing, Noboribetsu, Hokkaido, Japan, on October 22-24, 2014.
30. Ting-Fu Liao, *I-Chen Wu*, Guan-Wun Chen, Chung-Chin Shih, Po-Ya Kang, Bing-Tsung Chiang, Ting-Chu Ho and Ti-Rong Wu, "A Study of Software Framework for Parallel Monte Carlo Tree Search," the 19th Game Programming Workshop (GPW-2014), Hakone Seminar House, Kanagawa, Japan, November 7-9, 2014.
31. Ting-Han Wei, *I-Chen Wu*, Chao-Chin Liang, Bing-Tsung Chiang, Wen-Jie Tseng, Shi-Jim Yen, and Chang-Shing Lee, "Job-Level Algorithms for Connect6 Opening

- Position Analysis", ECAI Computer Games Workshop 2014, Prague, Czech Republic, August 2014.
32. Tung-Ying Wu, I-Chen Wu, Chao-Chin Liang, "Multi-Objective Flexible Job Shop Scheduling Problem Based on Monte-Carlo Tree Search", the 2013 Conference on Technologies and Applications of Artificial Intelligence (TAAI 2013), Taipei, Taiwan, December 2013. (Merit Paper Award)
 33. Ting-Fu Liao, Bo-Yang Kang, Bing-Chong Chiang, I-Chen Wu, "Demonstrations on Software Framework for Parallel Monte Carlo Tree Search", the 2013 Conference on Technologies and Applications of Artificial Intelligence (TAAI 2013), Taipei, Taiwan, December 2013.
 34. Lung-Ping Chen, I-Chen Wu, Chih-Wei Hsieh, Yuan-Yao Chang, Hung-Hsuan Lin, Wen-Jie Tseng, "Enhancing the Efficiency of Parallel Game Tree Search in Desktop Grid Federations", Computer Games and Intelligence Workshop, Yokohama, Japan, August 2013.
 35. I-Chen Wu, Hao-Hua Kang, Hung-Hsuan Lin, Ping-Hung Lin, Ting-Han Wei, Chieh-Min Chang, Ting-Fu Liao, "Dependency-Based Search for Connect6", The International Conference on Computers and Games (CG 2013), Yokohama, Japan, August 2013. **(Best Paper Award)**
 36. Lung-Ping Chen, I-Chen Wu, Chih-Wei Hsieh, Der-Johng Sun, Hung-Hsuan Lin, "The Development of the Resource Broker of Desktop Grid Federation for Tree Search Applications", The 27th Annual Conference of The Japanese Society for Artificial Intelligence (JSAI), Toyama, Japan, June 2013.
 37. Wen-Jie Tseng, Jr-Chang Chen, I-Chen Wu, Ching-Hua Kuo, Po-Han Lin, "A Supervised Learning Method for Chinese Chess Programs", The 27th Annual Conference of The Japanese Society for Artificial Intelligence (JSAI), Toyama, Japan, June 2013.
 38. Hao-Yun Liu, I-Chen Wu, Ting-Fu Liao, Hao-Hua Kang, Lung-Pin Chen, "Software Framework for Generic Game Development in CGDG", International Computer Symposium (ICS 2012), Hualien, Taiwan, December 2012.
 39. Shi-Jim Yen, Cheng-Wei Chou, Jr-Chang Chen, I-Chen Wu, Kuo-Yuan Kao, "The Art of the Chinese Dark Chess Program DIABLE", International Computer Symposium (ICS 2012), Hualien, Taiwan, December 2012.
 40. Tung-Ying Liu, I-Chen Wu, Der-Johng Sun, "Solving the Slitherlink Problem", the 2012 Conference on Technologies and Applications of Artificial Intelligence (TAAI 2012), Tainan, Taiwan, November 2012.
 41. Hao-Yun Liu, I-Chen Wu, Hao-Hua Kang, Ting-Fu Liao, "System Demonstration for Generic Game Development Framework", the 2012 Conference on Technologies

and Applications of Artificial Intelligence (TAAI 2012), Tainan, Taiwan, November 2012.

42. Ji-Hong Zheng, Chia-Yun Hu, I-Chen Wu, Wen-Jie Tseng, Ching-Hsuan Wei, Hung-Hsuan Lin, Chieh-Min Chang, Hao-Hua Kang, Hsiu-Chuan Lin, "Connect6 Programs on Mobile Devices", the 2012 Conference on Technologies and Applications of Artificial Intelligence (TAAI 2012), Tainan, Taiwan, November 2012. (Excellent Demo Award)
43. I-Chen Wu, Chih-Wei Hsieh, Der-Johng Sun, Hung-Hsuan Lin, Ping-Hung Lin, Lung-Ping Chen and Ching-Ping Chen, "Evaluation a PDG System for Connect6 Application." 2012 Symposium on Cloud and Services Computing (SC2-2012), Taichung, Taiwanm, 2012.
44. Hao-Yun Liu, I-Chen Wu, Hao-Hua Kang, Ching-Hua Kuo, Ting-Fu Liao, "Generic Board Game Development Framework", Workshop on Advanced and Usable Software, Taipei, Taiwan, December 2011.
45. I-Chen Wu, Hsin-Ti Tsai, Hung-Hsuan Lin, Yi-Shan Lin, Chieh-Min Chang, Ping-Hung Lin, "Temporal Difference Learning for Connect6", The 13th Advances in Computer Games Conference (ACG 13), Tilburg, The Netherlands, 20-22 November 2011.
46. Cheng-Hung Lin, Yi-Chang Shan, I-Chen Wu, "Tournament Framework for Computer Mahjong Competitions", The 2011 International Conference on Technologies and Applications of Artificial Intelligence (TAAI), Chungli, Taiwan, November 2011.
47. H.-H. Lin, I-Chen Wu, "Solving the Minimum Sudoku Problem", The International Workshop on Computer Games (IWCG 2010), Hsinchu, Taiwan, November 2010.
48. Yi-Chang Shan, I-Chen Wu, Hung-Hsuan Lin, Kuo-Yuan Kao, "Solving 9 Layer Triangular Nim", The International Workshop on Computer Games (IWCG 2010), Hsinchu, Taiwan, November 2010.
49. Kuo-Yuan Kao, I-Chen Wu, Yi-Chang Shan, Hung-Hsuan Lin, "Chilled Domineering", The International Workshop on Computer Games (IWCG 2010), Hsinchu, Taiwan, November 2010.
50. I-Chen Wu, H.-H. Lin, P.-H. Lin, D.-J. Sun, Y.-C. Chan and B.-T. Chen, "Job-Level Proof-Number Search for Connect6", The International Conference on Computers and Games (CG 2010), Kanazawa, Japan, September 2010.
51. I-Chen Wu, Chingping Chen, Ping-Hung Lin, Guo-Zhan Huang, Lung-Ping Chen, Der-Johng Sun, Yi-Chih Chan, and Hsin-Yun Tsou, "A Volunteer-Computing-Based Grid Environment for Connect6 Applications", The 12th IEEE International

- Conference on Computational Science and Engineering (CSE-09), August 29-31, Vancouver, Canada, 2009. (Acceptance Ratio: 21%)
52. Sheng-Hao Chiang, I-Chen Wu, and Ping-Hung Lin, "On Drawn K-In-A-Row Games", the 12th Advances in Computer Games Conference (ACG12), Pamplon, Spain, May 2009.
 53. I-Chen Wu, Ching-Ping Chen, Ping-Hung Lin, Guo-Zhan Huang, Lung-Ping Chen, Der-Johng Sun, and Hsin-Yun Tsou, "A Desktop Grid Computing Service for Connect6 Applications", International Symposium on Grid Computing 2009, Academia Sinica, Taipei, Taiwan, April 2009.
 54. Lung-Pin Chen, Yi-Pin Lin, I-Chen Wu, Der-Johng Sun, Yi-Jung Lin, and Tzu-Chiang Chou, "Automated XML Transformation Based on Visual Web Data Extraction Tools", Information Education and Technological Applications Conference (IETAC2008), Taichung, Taiwan, November 2008.
 55. Yi-Hsien Wang and I-Chen Wu, "Evaluating Java AWT for Cross-Platform Java Game Development", International Computer Symposium (ICS2008), Taipei, Taiwan, November 2008.
 56. Yi-Hsien Wang, Victor Gau, Trevor Bosaw, Jenq-Neng Hwang, Alan Lippman, Dan Lieberman and I-Chen Wu, "Generalization Performance Analysis of Flow-based Peer-to-Peer Traffic Identification", 2008 IEEE International Workshop on MACHINE LEARNING FOR SIGNAL PROCESSING (MLSP2008), Cancun, Mexico, October 2008.
 57. I-Chen Wu, Ping-Hung Lin, Po-Chen Hsu, Loon-Been Chen, and Jui-Yuan Su, "HybridDiff: An Algorithm for A New Tree Editing Distance Problem", International Computer Symposium (ICS2006), December 2006.
 58. I-Chen Wu, and Dei-Yen Huang, "A New Family of k-in-a-row Games", the 11th Advances in Computer Games Conference (ACG'11), Taipei, Taiwan, September 2005.
 59. I-Chen Wu, Jui-Yuan Su, and Loon-Been Chen, "A Web Data Extraction Description Language and Its Implementation", The 29th Annual International Computer Software and Application Conference (COMPSAC 2005), Edinburgh, Scotland, July 2005. (Acceptance Ratio: ~25.9%)
 60. I-Chen Wu, Jui-Yuan Su, and Loon-Been Chen, "On the Web Data Extraction Model", The 17th International Conference on Software Engineering and Knowledge Engineering, Taipei, Taiwan, July 2005.
 61. Yet-Shiang Wang, Wen-Nung Tsai, and I-Chen Wu, "WGDE -- WAP Game Development Environment", in 2004 International Computer Symposium (ICS2004), Taipei, Dec. 2004.

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- Web chat platform, 1999
- Price comparison system and engine, 2001
- Web extraction system (BODE system with BODED Language), 2002-2007
- Chimo (棋謀), Chinese Chess (象棋) program (about 7 dan), 2005~
- NCTU6 (交大六號), Connect6 (六子棋) program (close to top players in Taiwan), 2006~ (以下是曾參加之比賽)
- Connect6Lib, Connect6 (六子棋) Editor, 2008~
- Sudoku (數獨) solver, 2007~
- Mahjong (麻將) program, 2008~
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- HappyGo, Go (圍棋) program, 2009~
- Push-model desktop grid systems (a kind of volunteer computing system) for Connect6, 2009~
- Mobile game platform, 2009~
- Connect6 opening generator (based on the desktop grid system), 2009~
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- More computer game programs, such as Sudoku, Nurikabe, Nonogram, Lightup, 2010~
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