

Table of Contents

Accelerated UCT and Its Application to Two-Player Games	1
<i>Junichi Hashimoto, Akihiro Kishimoto, Kazuki Yoshizoe, and Kokolo Ikeda</i>	
Revisiting Move Groups in Monte-Carlo Tree Search	13
<i>Gabriel Van Eyck and Martin Müller</i>	
PACHI: State of the Art Open Source Go Program	24
<i>Petr Baudiš and Jean-loup Gailly</i>	
Time Management for Monte-Carlo Tree Search in Go	39
<i>Hendrik Baier and Mark H.M. Winands</i>	
An MCTS Program to Play EinStein Würfelt Nicht!	52
<i>Richard J. Lorentz</i>	
Monte-Carlo Tree Search Enhancements for Havannah	60
<i>Jan A. Stankiewicz, Mark H.M. Winands, and Jos W.H.M. Uiterwijk</i>	
Playout Search for Monte-Carlo Tree Search in Multi-player Games	72
<i>J. (Pim) A.M. Nijssen and Mark H.M. Winands</i>	
Towards a Solution of 7x7 Go with Meta-MCTS	84
<i>Cheng-Wei Chou, Ping-Chiang Chou, Hassen Doghmen, Chang-Shing Lee, Tsan-Cheng Su, Fabien Teytaud, Olivier Teytaud, Hui-Ming Wang, Mei-Hui Wang, Li-Wen Wu, and Shi-Jim Yen</i>	
MCTS Experiments on the Voronoi Game	96
<i>Bruno Bouzy, Marc Métivier, and Damien Pellier</i>	
4*4-Pattern and Bayesian Learning in Monte-Carlo Go	108
<i>Jiao Wang, Shiyuan Li, Jitong Chen, Xin Wei, Huizhan Lv, and Xinhe Xu</i>	
Temporal Difference Learning for Connect6	121
<i>I-Chen Wu, Hsin-Ti Tsai, Hung-Hsuan Lin, Yi-Shan Lin, Chieh-Min Chang, and Ping-Hung Lin</i>	
Improving Temporal Difference Learning Performance in Backgammon Variants	134
<i>Nikolaos Papahristou and Ioannis Refanidis</i>	

CLOP: Confident Local Optimization for Noisy Black-Box Parameter Tuning	146
<i>Rémi Coulom</i>	
Analysis of Evaluation-Function Learning by Comparison of Sibling Nodes	158
<i>Tomoyuki Kaneko and Kunihito Hoki</i>	
Approximating Optimal Dudo Play with Fixed-Strategy Iteration Counterfactual Regret Minimization	170
<i>Todd W. Neller and Steven Hnath</i>	
The Global Landscape of Objective Functions for the Optimization of Shogi Piece Values with a Game-Tree Search	184
<i>Kunihito Hoki and Tomoyuki Kaneko</i>	
Solving BREAKTHROUGH with Race Patterns and Job-Level Proof Number Search	196
<i>Abdallah Saffidine, Nicolas Jouandeau, and Tristan Cazenave</i>	
Infinite Connect-Four Is Solved: Draw	208
<i>Yoshiaki Yamaguchi, Kazunori Yamaguchi, Tetsuro Tanaka, and Tomoyuki Kaneko</i>	
Blunder Cost in Go and Hex	220
<i>Henry Brausen, Ryan B. Hayward, Martin Müller, Abdul Qadir, and David Spies</i>	
Understanding Distributions of Chess Performances	230
<i>Kenneth W. Regan, Bartłomiej Maciejaja, and Guy M^cC. Haworth</i>	
Position Criticality in Chess Endgames	244
<i>Guy M^cC. Haworth and Á. Rusz</i>	
On Board-Filling Games with Random-Turn Order and Monte Carlo Perfectness	258
<i>Ingo Althöfer</i>	
Modeling Games with the Help of Quantified Integer Linear Programs	270
<i>Thorsten Ederer, Ulf Lorenz, Thomas Opfer, and Jan Wolf</i>	
Computing Strong Game-Theoretic Strategies in Jotto	282
<i>Sam Ganzfried</i>	
Online Sparse Bandit for Card Games	295
<i>David L. St-Pierre, Quentin Louveaux, and Olivier Teytaud</i>	
Game Tree Search with Adaptive Resolution	306
<i>Hung-Jui Chang, Meng-Tsung Tsai, and Tsan-sheng Hsu</i>	

Designing Casanova: A Language for Games	320
<i>Giuseppe Maggiore, Alwise Spanò, Renzo Orsini, Giulia Costantini, Michele Bugliesi, and Mohamed Abbadi</i>	
Affective Game Dialogues: Using Affect as an Explicit Input Method in Game Dialogue Systems	333
<i>Michael Lankes and Thomas Mirlacher</i>	
Generating Believable Virtual Characters Using Behavior Capture and Hidden Markov Models	342
<i>Richard Zhao and Duane Szafron</i>	
Author Index	355