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Preface

The Computers and Games (CG) series began in 1998 with the objective of showcasing new developments in artificial intelligence (AI) research that used games as the experimental test-bed. The first two CG conferences were held at Hamamatsu, Japan (1998, 2000). Computers and Games 2002 (CG 2002) was the third event in this biennial series. The conference was held at the University of Alberta (Edmonton, Alberta, Canada), July 25–27, 2002. The program consisted of the main conference featuring refereed papers and keynote speakers, as well as several side events including the Games Informatics Workshop, the Agents in Computer Games Workshop, the Trading Agents Competition, and the North American Computer Go Championship.

CG 2002 attracted 110 participants from over a dozen countries. Part of the success of the conference was that it was co-located with the National Conference of the American Association for Artificial Intelligence (AAAI), which began in Edmonton just as CG 2002 ended.

The CG 2002 program had 27 refereed paper presentations. The papers ranged over a wide variety of AI-related topics including search, knowledge, learning, planning, and combinatorial game theory. Research test-beds included one-player games (blackjack, sliding-tile puzzles, Sokoban), two-player games (Amazons, awari, chess, Chinese chess, clobber, Go, Hex, Lines of Action, Othello, shogi), multi-player games (Chinese checkers, cribbage, Diplomacy, hearts, spades), commercial games (role-playing games, real-time strategy games), and novel applications (Post’s Correspondence Problem).

The Computers and Games conference has traditionally appealed to researchers working on artificial intelligence problems that have been motivated by the desire to build high-performance programs for the classic board and card games. However, the commercial games industry has its own set of challenging AI problems that need to be investigated. These problems are difficult, in part because they need solutions that have tight real-time constraints. Further, from the research point of view, many of these research problems have “fuzzy” outcomes. Our community is used to classic performance metrics such as tree size or winning percentage, whereas the commercial games community values the intangible “fun factor” and is not interested in world-beating programs. In an attempt to get more communication between these two communities, we strove to diversify the range of interest for CG by trying to attract more commercial involvement. We were partially successful, enjoying invited talks from Scott Grieg (BioWare, Corp.) and Denis Papp (TimeGate Studios), as well as three refereed papers.

We want to thank our keynote speakers for their excellent presentations:

- Murray Campbell (IBM T.J. Watson Research Center): “Deep Blue: Five Years Later.”
- Matt Ginsberg (Computational Intelligence Research Laboratory, University of Oregon): “GIB: Imperfect Information in a Computationally Challenging Game.”
- Scott Grieg (BioWare, Corp.): “Tales from the Trenches: Practical AI in Video Games.”
- John Romein (Free University, Amsterdam): “Solving Awari Using Large-Scale Parallel Retrograde Analysis.”
- Peter Stone (University of Texas at Austin): “The Trading Agent Competition: Two Champion Adaptive Bidding Agents.”

All the keynote presentations were conference highlights – a reflection of the quality of the speakers and their talks.

This conference would not have been possible without the tireless efforts of many people. The quality of the papers presented at Computers and Games 2002 is a reflection of the excellent job done by the program committee and the referees. Numerous other people helped make this event a success: Darse Billings, Jim Easton, Amanda Hansen, Akihiro Kishimoto, Tony Marsland, Louise Whyte, Peter Yap, and Ling Zhao. Thank you!

Finally, we thank the Department of Computing Science (University of Alberta), the University of Alberta (Research), and BioWare Corp. for their sponsorship.

August 2003

Yngvi Björnsson,
Martin Müller,
Jonathan Schaeffer

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Computers and Games 2002 conference attendees

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