Preface

Over the last few years, game theory has proved to be a powerful tool with which to understand interactions in systems composed of multiple autonomous artificial agents. It has been employed in the design of algorithms and strategies for interaction, coordination, communication, negotiation, coalition formation, fair voting techniques, market-based resource management systems, and industrial-scale information economies. More recently, decision theory has been adopted by a number of authors as a way of handling the uncertainty that rational agents inevitably face in any moderately complex environment. Of course, game theory and decision theory are also quite closely related.

As a result of this close connection, it seemed to us[1] that there was much to gain from bringing together researchers interested in game theory and decision theory together to:

- Present recent work on the application of these techniques in the construction of agent systems; and
- Discuss the cross-over between the fields.

The Workshop on Game Theoretic and Decision Theoretic Agents provides a forum in which this can happen.

This is now the sixth workshop we have held. The first was held in London in conjuction with the European Conference on Symbolic and Quantitative Approaches to Reasoning and Uncertainty (ECSQARU 99), the second was held in Boston in conjunction with the International Conference on Multi-Agent Systems (ICMAS 2000), the third was a AAAI Spring Symposium at Stanford in 2001, the fourth was held in conjunction with AAAI 2002 in Edmonton, and the fifth was held in conjunction with AAMAS 2003 in Melbourne.

Program Committee

The Program Committee was chaired by Simon Parsons (City University of New York) and Piotr Gmytrasiewicz (University of Illinois at Chicago), and comprised:

Jesus Cerquides Bueno

Amy Greenwald

Peter McBurney

Rohit Parikh

Mark Pauly

Steve Phelps

David Pynadath

Martijn Schut

Richard Stearns

Wynn Stirling

Leon van der Torre

Karl Tuyls

Russell Vane

Michael Wooldridge

Shlomo Zilberstein

We are grateful to the above for their help in reviewing the papers and for their support for the workshop.

July 2004   Simon Parsons and Piotr Gmytrasiewicz

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1   The original "us" being Mike Wooldridge and Simon Parsons, who chaired the first GTDT workshop. Piotr Gmytrasiewicz has co-chaired the workshop with Simon Parsons since 2000.