Preface

Artificial Intelligence is a field with a long history, which is still very much active and developing today. Developments of new and improved techniques, together with the ever-increasing levels of available computing resources, are fueling an increasing spread of AI applications. These applications, as well as providing the economic rationale for the research, also provide the impetus to further improve the performance of our techniques. This further improvement today is most likely to come from an understanding of the ways our systems work, and therefore of their limitations, rather than from ideas 'borrowed' from biology. From this understanding comes improvement; from improvement comes further application; from further application comes the opportunity to further understand the limitations, and so the cycle repeats itself indefinitely.

In this volume are papers on a wide range of topics; some describe applications that are only possible as a result of recent developments, others describe new developments only just being moved into practical application. All the papers reflect the way this field continues to drive forward. This conference is the 15th in an unbroken series of annual conferences on Industrial and Engineering Application of Artificial Intelligence and Expert Systems organized under the auspices of the International Society of Applied Intelligence. This series of conferences has played an important part in promulgating information about AI applications, and an inspection of proceedings of the conferences in this series shows just how both the magnitude and pace of development has increased over the past 15 years.

I would like to welcome delegates to this conference. I know that you will find much to learn from the papers as well as from the informal discussion that is so important a part of every conference.

Acknowledgements

People who have not organized an international conference often have little idea of all that is involved. In the case of this conference the first call for papers was issued at IEA/AIE 2001, a year ago. Papers were submitted electronically at a dedicated conference website. A technical committee of some 50 referees were recruited, lodged their details on the conference website, and were issued with passwords and special access privileges. Over 150 papers from 28 countries were each matched up with at least 2 suitable referees, who downloaded an electronic copy of the whole paper and then lodged their review electronically. The papers to be accepted were selected using these responses, and emails advising them of the acceptance of their paper were sent to the authors. These emails also gave them the reviewers' comments and advised of the format requirements for the final modified paper. The final files were collected, again at the website, before being sent to form the proceedings that you are holding.

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Clearly, without the website, the logistics of handing so much correspondence from all over the world would have been much, much worse, and so it is with deep gratitude that I acknowledge the efforts of Clinton Woodward who designed and programmed the website which, together with all the software behind it, was able to either automate or substantially assist with the whole process.

While I am grateful to all the members of the organizing committee, I wish to especially acknowledge contributions to the conference organization from David Braendler, David Liley, and Graham Forsyth together with the entire program committee.

And, last but not least, I would like to thank all our authors and speakers, without whom this conference would have no reason to exist.

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Tim Hendtlass