Research and Development in
Intelligent Systems XXIV

Max Bramer Frans Coenen Miltos Petridis
Editors

Research and Development in Intelligent Systems XXIV

Proceedings of AI-2007, the Twenty-seventh SGAI International Conference on Innovative Techniques and Applications of Artificial Intelligence

Springer

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TECHNICAL PROGRAMME CHAIR'S INTRODUCTION

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This volume comprises the refereed technical papers presented at AI-2007, the Twenty-seventh SGAI International Conference on Innovative Techniques and Applications of Artificial Intelligence, held in Cambridge in December 2007. The conference was organised by SGAI, the British Computer Society Specialist Group on Artificial Intelligence.

The papers in this volume present new and innovative developments in the field, divided into sections on Constraint Satisfaction, AI Techniques, Data Mining and Machine Learning, Multi-Agent Systems, Data Mining, and Knowledge Acquisition and Management. The volume also includes the text of short papers presented as posters at the conference.

This year's prize for the best refereed technical paper was won by a paper entitled 'An Evolutionary Algorithm-Based Approach to Robust Analog Circuit Design using Constrained Multi-Objective Optimization' by Giuseppe Nicosia, Salvatore Rinaudo and Eva Sciacca. SGAI gratefully acknowledges the long-term sponsorship of Hewlett-Packard Laboratories (Bristol) for this prize, which goes back to the 1980s.

This is the twenty-fourth volume in the *Research and Development* series. The Application Stream papers are published as a companion volume under the title *Applications and Innovations in Intelligent Systems XV*.

On behalf of the conference organising committee I should like to thank all those who contributed to the organisation of this year's technical programme, in particular the programme committee members, the executive programme committee and our administrators Rachel Browning and Bryony Bramer.

Max Bramer
Technical Programme Chair, AI-2007

ACKNOWLEDGEMENTS

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