Applications and Innovations in Intelligent Systems XV

Richard Ellis Tony Allen Miltos Petridis
Editors

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

Springer

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British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

ISBN 978-1-84800-085-8 e-ISBN 978-1-84800-086-5

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9 8 7 6 5 4 3 2 1

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APPLICATION PROGRAMME CHAIR'S INTRODUCTION

RICHARD ELLIS
Managing Director, Stratum Management Ltd, UK

The papers in this volume are the refereed application 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.

This volume contains twenty two refereed papers which present the innovative application of a range of AI techniques in a number of subject domains. This year, the papers are divided into sections on Medical Systems; HCI and Natural Language Systems: Imaging and Sensing Systems; Decision Support Systems; Autonomous Machines; and Industrial Systems. The volume also includes the text of nine short papers presented as posters at the conference.

In 2005, SGAI instituted the *Rob Milne Memorial Award* for the best refereed application paper, in memory of the invaluable contribution to AI made by the late Dr Rob Milne, a long-standing and highly respected member of the SGAI committee and the wider AI community. This year the award was won by a paper entitled "On a Novel ACO-Estimator and its Application to the Target Motion Analysis Problem", by Dr Lars Nolle of Nottingham Trent University, UK.

This is the fifteenth volume in the *Applications and Innovations* series. The Technical Stream papers are published as a companion volume under the title *Research and Development in Intelligent Systems XXIV*.

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.

Richard Ellis
Application Programme Chair, AI-2007

ACKNOWLEDGEMENTS

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