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Preface

This volume contains the papers presented at the 8th International Conference on *Artificial Intelligence – Methodology, Systems, Applications* (AIMSA'98). AIMSA'98 was held 21–23 September 1998 in Sozopol, Bulgaria, a small, ancient, and picturesque town on the Black sea coast, famous for its unique architecture and art exhibitions.

The AIMSA conference series has provided a biennial forum for the presentation of AI research and development since 1984. The conference, which is held in Bulgaria, covers the full range of topics in Artificial Intelligence (AI) and provides an ideal forum for international scientific exchange between Central/Eastern Europe and the rest of the world.

AIMSA'98 was mainly (but not only) centered around the the use of reasoning in AI. A particular focus was given to: case-based reasoning, multi-agent systems, planning and temporal reasoning, decision procedures, and inductive reasoning. Other topics of interest were: abduction, constraint based reasoning, knowledge acquisition, knowledge based systems, learning, natural language processing, temporal and causal reasoning. This of course was not an exhaustive list, and papers from other areas were also encouraged.

The decision to focus on selected areas was very well received. There were 90 papers submitted to AIMSA'98 (three of which arrived too late to be refereed). Each paper was reviewed by three program committee members, and 41 papers were selected for presentation at the conference. In addition, the AIMSA'98 program contained two invited talks; the invited speakers were John Mylopoulos (University of Toronto, Canada) and Manuela Veloso (CMU, Pittsburgh, PA, USA). AIMSA'98 also featured a Best Paper Award which was won *ex aequo* by M. Benerecetti, P. Bouquet, and C. Ghidini with the paper *Formalizing belief reports – The approach and a case study* and B. Bessant, E. Grégoire, P. Marquis, and L. Sais with the paper *Combining nonmonotonic reasoning and belief revision: a practical approach*.

I would like to thank the many people who made AIMSA'98 possible. Foremost is Christo Dichev, who chaired the local organizing committee. Paolo Bouquet did a wonderful job as a publicity chair. The program committee members had to do much more work than expected, but they managed to do it in time, and with very good quality reviews. Finally, Roberto Sebastiani here at ITC-IRST supported me in my job as program chair.

Organization

The AIMSA conference is organized by: Bulgarian Artificial Intelligence Association, Institute for Information Technologies (ITT), Union of Bulgarian Mathematicians, with the support of the Bulgarian Society for Cognitive Science and of the Bulgarian Association for Pattern Recognition.

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