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Foreword

This volume of the Lecture Notes in Computer Science presents the proceedings of the Third International Conference on Artificial Intelligence and Symbolic Mathematical Computation (AISMC-3), held in Steyr (Austria), September 23–25, 1996, and organised by RISC-Linz (Research Institute for Symbolic Computation, University of Linz) with support from ProFactor (Steyr).

The AISMC initiative is an interdisciplinary forum which aims at bringing together people from different areas of research and application fields. Emphasis is on the interaction of methods and problem solving approaches from AI and symbolic mathematical computations in a wide sense. The originators of the AISMC initiative are Jacques Calmet and John A. Campbell. AISMC-3 continues the successful events AISMC-1, organised by J. Calmet (Karlsruhe, August 1992), and AISMC-2, organised by J.A. Campbell (Cambridge, August 1994). The proceedings of these conferences have been published as Springer LNCS volumes 737 and 958, respectively. It is intended to continue these meetings biannually. An introductory overview of the basic ideas and intentions behind AISMC can be found in the opening paper by the first two editors in the proceedings of AISMC-1.

To stress applications and to establish links to engineering disciplines we incorporated in AISMC-3 the branch “Engineering and Industrial Applications”. At the end of the first conference day a panel discussion was devoted to this topic.

The conference site in Steyr is a restored old factory building which is now a museum called “Museum industrielle Arbeitswelt”. In this sense we consider the conference as an event embedded in the local “cooperation triangle” Linz – Hagenberg – Steyr. This triangle was set up to integrate the cooperation of university institutes and companies. Bruno Buchberger, the director and founder of RISC, has been and still is one of the main propagators and initiators of this idea.

The papers in the proceedings are listed according to the schedule of talks at the conference. As one can see, the titles of the articles reflect the interdisciplinary character of the meeting. Four invited talks are devoted to different areas. We thank the invited speakers for timely sending the full manuscripts of their contribution.

The conference is sponsored by AAI, ProFactor (Steyr), RISC-Linz and several other institutions and companies (which cannot be listed here as these proceedings go to print). We are grateful to all of them. Last not least we would like to thank all the program committee members and the referees for their valuable support.

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