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Preface

This volume contains the proceedings of the 7th International Workshop on Software and Compilers for Embedded Systems, SCOPEs 2003, held in Vienna, Austria, September 24–26, 2003. Initially, the workshop was referred to as the International Workshop on Code Generation for Embedded Systems. The first workshop took place in 1994 in Schloss Dagstuhl, Germany. From its beginnings, the intention of the organizers was to create an atmosphere in which the researchers could participate actively in dynamic discussions and profit from the assembly of international experts in the field.

It was at the fourth workshop, in St. Goar, Germany, in 1999, that the spectrum of topics of interest for the workshop was extended, and not only code generation, but also software and compilers for embedded systems, were considered.

The change in fields of interest led to a change of name, and this is when the present name was used for the first time. Since then, SCOPEs has been held again in St. Goar, Germany, in 2001; Berlin, Germany, in 2002; and this year, 2003, in Vienna, Austria.

In response to the call for papers, 43 very strong papers from all over the world were submitted. The program committee selected 26 papers for presentation at SCOPEs 2003. All submitted papers were reviewed by at least three experts in order to ensure the quality of the work presented at the workshop.

The papers were divided for presentation into the following categories: code size reduction, code selection, loop optimizations, automatic retargeting, system design, register allocation, offset assignment, analysis and profiling, and memory and cache optimizations.

In addition to the selected contributions, an invited talk was given by Jim Dehnert from Transmeta Corporation. An abstract of this talk is also included in this volume.

I would like to thank all the authors who submitted papers for consideration, since none of this would have been possible without their research efforts. I would like to gratefully acknowledge the support of our sponsor, Atair Software. I thank the program committee and all the referees for carefully reviewing the submitted papers. Finally, I thank Nerina Bermudo and Ulrich Hirnschrott for dealing with the local organization, compiling the proceedings, and maintaining the web site.

Organization

SCOPES 2003 was organized by the Institut für Computersprachen, Technische Universität Wien and CD-Lab Compilation Techniques for Embedded Processors in cooperation with EDAA, sponsored by Atair Software.

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