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# Architecture of Computing Systems – ARCS 2009

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Proceedings

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# Preface

The ARCS series of conferences has over 30 years of tradition reporting top-notch results in computer architecture and operating systems research. It is organized by the special interest group on "Computer and System Architecture" of the GI (Gesellschaft für Informatik e.V.) and ITG (Informationstechnische Gesellschaft im VDE - Information Technology Society). In 2009, ARCS was hosted by the Delft University of Technology, which has one of the leading information technology schools in Europe.

This year's special focus was set on energy awareness viewed from two different perspectives. Firstly, this deals with the improvement of computer systems to be as energy-efficient as possible (particularly for specific applications). One can think of heterogeneous multi-core architectures or reconfigurable architectures for this purpose. Secondly, this addresses the usage of computer systems to reduce the energy consumption of other systems, which might lead to problems of communication and cooperation. Like the previous conferences in this series, it continues to be an important forum for computer architecture research.

The call for papers resulted in a total of 57 submissions from around the world. Each submission was assigned to at least three members of the Program Committee for review. The Program Committee decided to accept 21 papers, which are arranged into eight sessions. The accepted papers are from: Finland, France, Germany, Japan, The Netherlands, Singapore, Spain, UK, and USA. Three intriguing keynotes from academia and industry complemented the strong technical program.

We would like to thank all who contributed to the success of this conference, in particular the members of the Program Committee (and the additional reviewers) for carefully reviewing the contributions and selecting a high-quality program. Our Workshop and Tutorial Chair Jörg Hähner did a perfect job in organizing the tutorials and coordinating the workshops. Our special thanks go to the members of the Organizing Committee for their numerous contributions: Thomas B. Preußer set up the conference software and designed and maintained the conference website. Dimitris Theodoropoulos took over the laborious task of preparing this volume. We would like to especially thank Carlo Galuzzi for taking care of the local arrangements and many other aspects in the organization of the conference.

We hope that all participants enjoyed a successful conference, made many new contacts, engaged in fruitful discussions, and had a pleasant stay in Delft.

March 2009

Christian Hochberger
Stephan Wong
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