Foreword

It was our great pleasure to extend a welcome to all who participated in SERA 2004, the second International Conference on Software Engineering Research, Management and Applications, held at the Omni Hotel, Los Angeles, California, USA. The conference would not have been possible without the cooperation of Seoul National University, Korea, the University of Lübeck, Germany, and Central Michigan University, USA. SERA 2004 was sponsored by the International Association for Computer and Information Science (ACIS).

The conference brought together researchers, practitioners, and advanced graduate students to exchange and share their experiences, new ideas, and research results in all aspects (theory, applications, and tools) of Software Engineering Research and Applications. At this conference, we had keynote speeches by Barry Boehm, C.V. Ramamoorthy, Raymond Yeh, and Con Kenney.

We would like to thank the publicity chairs, the members of our program committees, and everyone else who helped with the conference for their hard work and time dedicated to SERA 2004. We hope that SERA 2004 was enjoyable for all participants.

Barry Boehm

May 2004
Preface

The 2nd ACIS International Conference on Software Engineering – Research, Management and Applications (SERA 2004) was held at the Omni Hotel in Los Angeles, California, during May 5–7, 2004. The conference particularly welcomes contributions at the junction of theory and practice disseminating basic research with immediate impact on practical applications. The SERA conference series has witnessed a short, but successful history:

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<td>SERA 2004</td>
<td>Los Angeles, California</td>
<td>May 5–7, 2004</td>
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<td>SERA 2005</td>
<td>Mt. Pleasant, Michigan</td>
<td>August 11–13, 2005</td>
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The conference covers a broad range of topics from the field of software engineering including theory, methods, applications, and tools. The conference received 103 submissions from the scientific community in 18 different countries all over the world. Each paper was evaluated by three members of the International Program Committee and additional referees judging the originality, significance, technical contribution, and presentation style. After the completion of the review process 46 papers were selected for presentation at the conference which gave us an acceptance rate of about 45%.

The conference was structured into 14 sessions running in two parallel tracks. The conference sessions covered the following topics: formal methods and tools, data mining and knowledge discovery, requirements engineering, component-based software engineering, object-oriented technology and software architectures, Web engineering and Web-based applications, software reuse and software metrics, agent technology and information engineering, reverse engineering, communication systems and middleware design, XML applications and multimedia computing, parallel and distributed computing, and cost modelling and analysis.

Based on the opinion of the Program Committee and the recommendations of the session chairs, authors of selected papers were invited to submit a substantially revised and extended version for inclusion in the postconference proceedings. The submissions were subject to a second refereeing process. With great pleasure, we finally present 18 papers that were accepted for publication in Springer’s LNCS as the post-conference proceedings.

We would like to express our sincere thanks to the Honorary General Chair Barry Boehm and to the Conference Chair Con Kenney. We appreciate the dedication of Barry Boehm, C.V. Ramamoorthy, Raymond T. Yeh, and Con Kenney in contributing keynote speeches. We gratefully acknowledge the professional work of the International Program Committee and the subreviewers. We thank the Publicity Chairs for their commitment and, finally, the editorial staff at Springer for the smooth cooperation.

June 2005

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Chisu Wu
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(Swinburne University, Australia)
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