Foreword

It was our great pleasure to extend a welcome to all who participated in SERA 2003, the first world-classs International Conference on Software Engineering Research and Applications, which was held at Crowne Plaza Union Square Hotel, San Francisco, California, USA. The conference was sponsored by the International Association for Computer and Information Science (ACIS), in cooperation with the Software Engineering and Information Technology Institute at Central Michigan University.

This conference was aimed at discussing the wide range of problems encountered in present and future high technologies. In this conference, we had keynote speeches by Dr. Barry Boehm and Dr. C.V. Ramamoorthy and invited talks by Dr. Raymond Yeh, Dr. Raymond Paul, Dr. Mehmet Şahinoglu, which were fruitful to all who participated in SERA 2003.

We would like to thank the publicity chairs and the members of our program committees for their work on this conference. We hope that SERA 2003 was enjoyable for all participants.

C.V. Ramamoorthy

Preface

It was indeed our pleasure to welcome all of you to the 1st ACIS International Conference on Software Engineering Research and Applications (SERA 2003), June 25–27, 2003, Crowne Plaza Union Square Hotel, San Francisco, California, USA. SERA 2003 featured excellent theoretical and practical contents contributed by the international community in the areas of formal methods and tools, requirements engineering, software process models, communication systems and networks, software quality and evaluation, software engineering, networks and mobile computing, parallel/distributed computing, component- based software development, artificial intelligence and applications, software testing, reuse and metrics, database retrieval, HCI, software standards, computer security, software architectures, and modeling.

We received 104 papers (our Program Co-chair Prof. Kyung Whan Lee received 45 papers and Prof. Roger Lee received 59 papers) from 22 different countries around the world for possible presentation at the conference. Among those papers, a large number were high-quality paper submissions. Three reviewers reviewed each paper. After the completion of the peer-review process, our International Program Committee selected 53 papers, which gave about a 49% acceptance rate for publication in the ACIS conference proceedings. Of the 53 presented papers at the conference our international program committee selected 23 outstanding papers for publication in Springer's LNCS as the post-conference proceedings.

We would like to express our sincere appreciation to the following people for contributing to the success of this conference: Dr. C.V. Ramamoorthy, conference chair; Dr. Barry Boehm and Dr. C.V. Ramamoorthy, our keynote speakers; Dr. Raymond Yeh, Dr. Raymond Paul and Dr. Mehmet Şahinoglu, our invited speakers; the publicity chairs and the International Program Committee members who rose beyond the call of duty, contributing a large percentage of their time; the referees who accepted the last-minute requests for extra reviews; the session chairs who presided over the sessions; all the authors, attendees, and presenters who really made this conference possible and successful; Prof. Dr. Walter Dosch for his extra time and effort in communicating with Springer-Verlag about LNCS post-conference proceedings; and, finally, the editorial staff at Springer-Verlag. Furthermore, we would like to extend special thanks to Alfred Hofmann of Springer-Verlag who made this publication possible.

> Roger Y. Lee Kyung Whan Lee

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