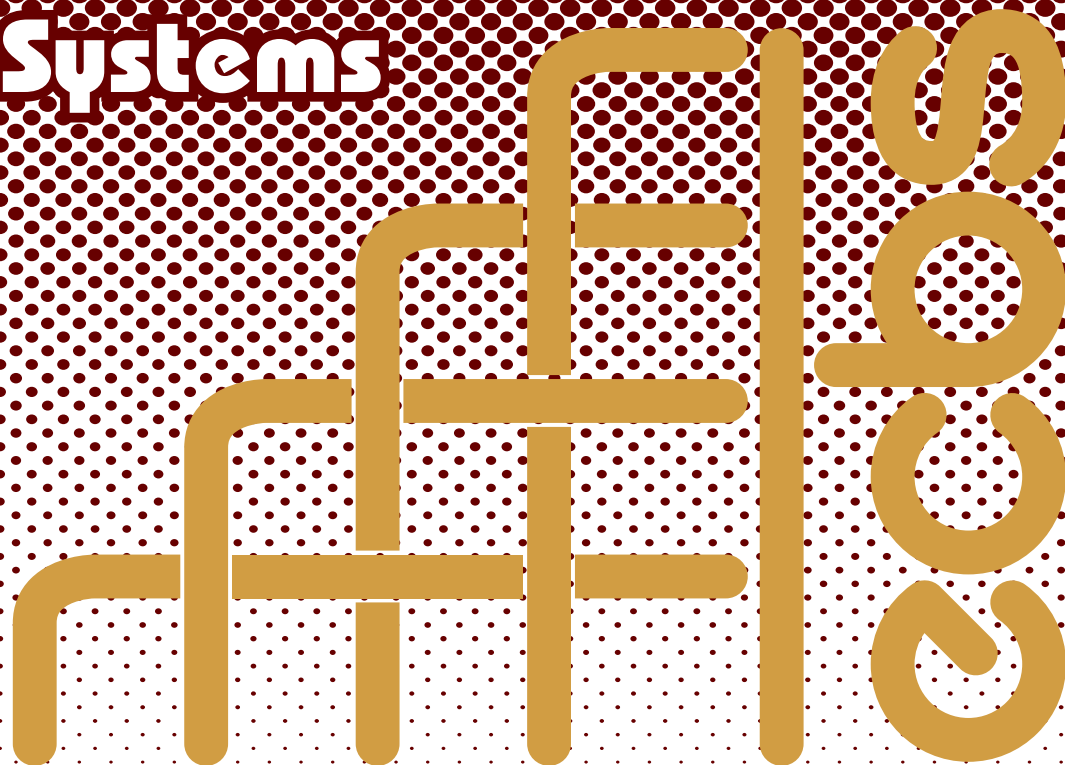


20th IEEE International Conference and Workshops on the

Engineering of Computer-Based Systems



ASU Ira A. Fulton
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Phoenix, Arizona
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Edited by Jerzy W. Rozenblit



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**20th Annual IEEE International Conference and
Workshops on the Engineering
of Computer Based Systems**

ECBS 2013

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20th Annual IEEE International Conference and Workshops on the Engineering of Computer Based Systems (ECBS)

ECBS 2013

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Foreword

Welcome to the 20th Annual IEEE International Conference and Workshops on the Engineering of Computer-Based Systems. The tradition continues as we bring back the conference to sunny Arizona. Experts from eleven countries will present research papers authored by sixty five scholars and practitioners. The conference will feature regular paper sessions and state of the art tutorials, giving participants a broad spectrum of venues from which to choose. Tutorial topics range from designing mobile-device apps and embedded software systems, to strengthening software security and modeling robotic behavior. This year's theme focuses on the societal and environmental impact of these systems in various sectors including energy, biotechnology and medical devices, IT, aerospace, optics, and materials science. ECBS has ramifications in every industry and in every type of technology across the world. Leaders in industries such as energy, IT, aerospace, optics and biotechnology are recognizing that by incorporating ECBS principles into their technological design and implementation, they can expand their company's reach and catapult their products into new performance levels. We want to thank the authors for their contributions to the success of this conference. We are grateful to the reviewers who were very diligent in selecting very high quality manuscripts for publication in this volume. Our thanks also go to our sponsors, Ms. Alaina Levine, the Local Arrangements Chair, and IEEE Computer Society Press for handling the publishing process.

We wish you a very productive and successful meeting!

Jerzy W. Rozenblit
Program Chair

Jonathan Sprinkle
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