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VLSI Design and Test

23rd International Symposium, VDAT 2019 Indore, India, July 4–6, 2019 Revised Selected Papers



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Preface

This book presents the state of the art developments on advances in VLSI for IoT and consumer electronics. The book is comprised of several important contributions by leading experts in the field. The chapters presented in this book, as contributions, are part of the 23rd International Symposium on VLSI Design and Test (VDAT 2019), held during July 4–6, 2019, in Indore, India. The contributions were rigorously peer reviewed by a team of leading experts from industry and academia. VDAT 2019 was spearheaded by the following international leaders: general chairs, Dr. Anirban Sengupta, *FIET*, *FBCS* (IIT Indore) and Dr. Santosh Kumar Vishvakarma (IIT Indore).

Each chapter of this book, adopted from VDAT 2019 proceedings, has been peer-reviewed by at least 2 reviewers (single-blind) in terms of novelty, technical correctness, impact of contribution, and advancement to the state of the art. There were 199 submissions in total for VDAT 2019 from around the world and there were 63 accepted papers under oral and poster category. Each of the accepted conference papers have been lucidly presented as a book chapter in these proceedings. The collection of these important contributions are grouped into six categories:

- · Analog and Mixed Signal Design
- Computing Architecture and Security
- Hardware Design and Optimization
- Low Power VLSI and Memory Design
- Device Modeling
- Hardware Implementation

The Technical Program Committee of VDAT 2019, who performed the review process, comprised of more than 80 experts nationally and internationally. The authors who contributed to this book spanned across several countries ranging from India, USA, Austria, Germany, Italy, Sweden, UK, etc. This truly reflects the international nature of the contributions compiled under this book.

We sincerely hope that you will enjoy the contributions of the book and that it will serve as a great reading for experts, students, practitioners, designers, researchers, and academics. We, the editors, would like to thank all the contributing authors, reviewers, and other supporting members for their help.

July 2019

Anirban Sengupta Sudeb Dasgupta Virendra Singh Rohit Sharma Santosh Kumar Vishvakarma

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