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# Information and Software Technologies

19th International Conference, ICIST 2013  
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Proceedings



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# Preface

We are proud to introduce the selection of papers presented during the International Conference on Information and Software Technologies – ICIST 2013. The event formerly known as the IT Conference is now in its late teens – this year marked the 19<sup>th</sup> iteration of this annual academic meeting.

Organized by the biggest technical university in the Baltic States – Kaunas University of Technology – the ICIST conference went international in 2008. Last year, we were proud to have the proceedings of the conference published by Springer for the first time. This issue of *Communications in Computer and Information Science* series is the result of our continuing cooperation. Combined with the dedication of the conference Program Committee, this fact reflects the relevance and quality of the included papers.

The original mission of the conference remains intact: to bring together practitioners and researchers aiming at the everlasting convergence between business, software, and system requirements as well as the application of new supporting technologies. However, being a rather compact event, we felt the need to focus our attention on accentuating the strengths of our contributors and Program Committee members. Therefore, the topics this year were restructured to encourage the submission of papers in the fields of information systems, business intelligence, software engineering, and IT applications. These topics have already become integral to societies at almost any level, forcing researchers to develop interdisciplinary approaches and to employ multidisciplinary ways of thinking. On the other hand, it is increasingly apparent that academia no longer holds the monopoly of scientific innovation. The need to bring scientists and practitioners together is as pressing as ever. This is exactly why all participants of the conference are encouraged to stay in Kaunas for one more day after the conference attending the full-length advanced industrial tutorials on software development practices by well-known practitioners. The event was co-located with ICIST for the fourth year in a row.

There were more than 60 submissions this year, and 34 were selected for this publication. The papers were reviewed by the Program Committee consisting of 72 professionals (supported by the team of additional reviewers) representing more than 40 academic institutions and four companies from 26 countries. Each submission was reviewed following a double-blind process by at least two reviewers, while borderline papers were evaluated by three or more reviewers.

Finally, we would like to express our gratitude to the Lithuanian State Science and Studies Foundation and Faculty of Informatics of Kaunas University of Technology whose support has driven the conference, making this event and this book possible

September 2013

Tomas Skersys  
Rimantas Butleris  
Rita Butkiene

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The 19th International Conference on Information and Software Technologies (ICIST 2013) was organized by Kaunas University of Technology and took place in Kaunas, Lithuania (October 10–11, 2013).

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