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John Krogstie · Hajo A. Reijers (Eds.)

Advanced Information Systems Engineering

30th International Conference, CAiSE 2018
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Preface

CAiSE 2018, the 30th International Conference on Advanced Information Systems Engineering was held in Tallinn, Estonia, during June 11–15, 2018.

The goal of the CAiSE conference series is to bring together the R&D community working on the models, methods, techniques, architecture, and technologies that address the design, engineering, operation, and evolution of information systems. The conference theme of CAiSE 2018 was "Information Systems in the Big Data Era," which acknowledges the disruptions brought about by the abundance of big data sources on government and business services, their users and customers, and their environments. This data abundance creates new opportunities to develop smart and personalized information systems. Concomitantly, it raises new challenges for information systems engineers, for example, in the areas of scalable data cleaning, integration and processing, real-time and predictive data analytics, and the cognification of information systems engineering.

The three invited keynotes of CAiSE 2018 provided three important perspectives on the big data era:

- Prof. Jan Recker (University of Cologne): "Information Systems Engineering in the Digital Age"
- Prof. Frank van Harmelen (Vrije Universiteit Amsterdam): "Information Systems in the Linked Data Era"
- Dr. Dan Bogdanov (Cybernetica): "Embedding Privacy by Design in Information Systems, One Business Process at a Time"

The accepted research papers and the CAiSE Forum address facets related to the theme of the conference, as well as the core topics associated with information systems design, engineering, and operation. The program included the following paper sessions:

- Process Execution
- User-Oriented IS Development
- Social Computing and Personalization
- The Cloud and Data Services
- Process Discovery
- Decisions and the Blockchain
- Process and Multi-level Modeling
- Data Management and Visualization
- Big Data and Intelligence
- Data Modeling and Mining
- Quality Requirements and Software

For CAiSE 2018, we received 179 full paper submissions. This year, we followed up with the selection process that was put in place in 2017. Each paper was initially reviewed by at least two Program Committee members. At the end of the first phase,

we rejected papers with consistent negative evaluations. In the second phase of the evaluation, all papers with at least one positive evaluation were reviewed by a member of the Program Board. All reviewers then engaged in an online discussion of these papers. Finally, during the physical meeting of the Program Board, the final decision was made about the acceptance or rejection of each paper. The Program Board meeting took place in Amsterdam during February 20–21, 2018. The overall evaluation process of the papers resulted in the selection of 37 high-quality papers, which amounts to an acceptance rate of 21%. The final program of CAiSE 2018 was complemented by workshops, co-located working conferences, and a PhD consortium. For each of these events, separate proceedings were published.

We would like to thank the general chairs, Marlon Dumas and Andreas Opdahl, as well as their organization team, including Fabrizio Maggi, Fredrik Milani, Alexander Nolte, and Eva Pruusapuu, for all their efforts with respect to organizing CAiSE 2018. We warmly thank the workshop chairs (Remco Dijkman and Raimundas Matulevičius), the forum chairs (Jan Mendling and Haralambos Mouratidis), the tutorial chairs (Massimo Mecella and Selmin Nurcan), the doctoral consortium chairs (Marite Kirikova, Audrone Lupeikiene, and Ernest Teniente), and the publicity chairs (Jennifer Horkoff, Ingo Weber, and Liang Zhang) for their excellent work and contributions. We are grateful, too, to Richard van der Stadt, who helped run the review process and prepare the proceedings. Henrik Leopold and Han van der Aa contributed greatly to a smooth execution of the Program Board meeting in Amsterdam. As editors of this volume, we also offer our sincere thanks to the members of the Program Committee, as well as the external reviewers involved, for their dedication in providing fair and constructive evaluations. Our final thanks are to the members of the Program Board, who played a great role in the reviewing process to which they devoted much of their time and wisdom.

April 2018

John Krogstie
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