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Preface

The IEEE International Conference Series on Business Informatics is the leading international forum for state-of-the-art research in Business Informatics. The IEEE CBI series encourages a broad understanding of Business Informatics research, and intends to further its many different facets, theoretical foundations and experiential body of knowledge. Business Informatics as a field of research and practice receives contributions from various fields of research in Informatics, Computer Science, Information Systems, Management Science, Organization Science and Economics.

The IEEE CBI series (www.cbi-series.org) serves as the central hub for Business Informatics research. The series started in 1998 as a workshop on Dependable and Real-Time E-Commerce Systems (DARE) and then continued as a Workshop on Advanced Issues of E-Commerce and Web-based Information Systems (WECWI) that in 2003 evolved into a conference named IEEE Conference on E-Commerce and Enterprise Computing (CEC). In 2013, the CEC, in its turn, enlarged its scope and became the IEEE International Conference on Business Informatics (CBI). Today, the IEEE CBI conference provides a forum for researchers and practitioners contributing to the construction, use and maintenance of information systems in their organizational use contexts, and stimulates discussion, synergy and collaboration among attendees.

The 20th anniversary edition, IEEE CBI 2018, held in beautiful Vienna, Austria called for submissions to the multidisciplinary field of Business Informatics, and welcomed a multitude of theoretical and practical perspectives and mindsets on today's challenges of the digital transformation. These challenges are reflected in the 9 topical conference tracks and an additional General Topics track at IEEE CBI 2018:

- Enterprise Modelling, Engineering and Architecture
- Business Process Management
- Information Systems Engineering
- Recommender Systems and Information Retrieval
- Information Management
- Business Analytics and Business Data Engineering
- Industry 4.0 (Industry Applications)
- Government 4.0 (E-Government)
- Business Innovation
- General Topics

IEEE CBI 2018 received 71 submissions, 21 of which have been selected as full presentations at the main conference, 8 of which as research-in-progress papers, while an additional 3 papers were recommended to the co-located workshops. Each submission was reviewed by three Program Committee members and received a recommendation from the corresponding Track Chairs. This review process allowed us to select the most relevant and highest quality papers and to offer the audience an exciting program including nine conference sessions, six workshop sessions, a panel discussion and two keynote presentations.

IEEE CBI 2018 hosts three co-located workshops attracting participants from both industry and academia. The 1st International Workshop on Business Analytics in Practice and Applied Research (BAPAR 2018) provided a forum to share and discuss how applied researchers and practitioners are dealing with Business Analytics solutions to create and transform business data into real-added business value (organized by Manel Brichni, Luxembourg Institute of Science and Technology and David Rozier, Grenoble University Hospital, France).

The 6th International Workshop on the Internet of Things and Smart Services (ITSS 2018) discussed advances in theory, applications and different approaches to using IoT and Smart Services, and dealt with business transformation due to digital economy implementation and about new types of services and innovative business models stemming from the high impact of IoT and data-based services as the next step in globalization including new strategy and recommendations on Collaborative Economy in 2016 by the European Commission (organized by Svetlana V. Maltseva and Mikhail M. Komarov, National Research University Higher School of Economics, Russia).

The 1st Workshop on Engineering for Service-oriented Enterprise (WESE 2018) discussed the engineering of new services, appropriate theories, models, methods, and other instruments for the analysis, design, implementation, evolution and governance of enterprises by combining (relevant aspects of) management and organization science and information systems science (organized by Wided Guédria, Luxembourg Institute of Science and Technology and Sérgio Guerreiro, University of Lisboa, Portugal).

We thank Bernhard Wally for setting up and maintaining the CBI 2018 website, and Gabriel Leal for maintaining the conference presence in social media. We also thank Christophe Feltus, Wided Guédria, and Iván Razo-Zapata of the Luxembourg Institute of Science and Technology for organizing the IEEE CBI 2018 co-located workshops.

The organization and successful running of IEEE CBI 2018 would not be possible without the valuable help and energy of a large number of highly motivated people. We would like to express our gratitude to the Program Committee members, the Track Chairs and additional reviewers for their valuable work in selecting the papers for the scientific program of the conference; to the authors for submitting their work to IEEE CBI 2018; and to the Session Chairs for guiding us through the conference sessions. For the proceedings, we are grateful to the production manager Lisa O’Conner at IEEE. Our special thanks go to all members of the local Organizing Committee at the TU Vienna for their hospitality and the organization of scientific and social events. Furthermore, we like to thank Christine Haas from the Austrian Computer Society for all the local arrangements and taking care of the registration.

Finally, we thank all participants both from academia and industry and we hope that you enjoy IEEE CBI 2018 in Vienna and that you find these proceedings a valuable source of information on Business Informatics.

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