



15th International Baltic Conference on Digital Business and Intelligent Systems

Baltic DB&IS 2022 Doctoral Consortium and Forum Proceedings

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Edited by

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This volume of CEUR-WS Proceedings contains two Baltic DB&IS 2022 Doctoral Consortium papers and 10 Conference Forum papers presented at the 15th International Baltic Conference on Digital Business and Intelligent Systems (Baltic DB&IS 2022). The conference was held in Riga, Latvia, 03-06 July 2022.

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Preface

These proceedings include the papers of the Doctoral Consortium and Conference Forum, held in conjunction with the 15th International Baltic Conference on Digital Business and Intelligent Systems (Baltic DB&IS 2022) in Riga, Latvia during 3-6 July 2022. Formerly, the conference series has been known as the International Baltic Conference on Databases and Information Systems. The 2022 conference was organized by University of Latvia and Riga Technical University, in cooperation with Tallinn University of Technology, University of Tartu, Vilnius University, and Vilnius Gediminas Technical University.

The Doctoral Consortium provided an opportunity for PhD students to present their work to senior researchers (mentors) and peers from a diverse set of academic and industrial institutions in a relaxed and supportive environment to further improve scientific writing and presentation skills of young researchers. The Doctoral Consortium also helped to receive constructive feedback on their research from the field experts, and supported building a network with peers and future colleagues. Each doctoral consortium submission was reviewed by at least three senior researchers and in the end two papers out of the four submissions are included to these proceedings and for the presentation at the conference. The topics of the Doctoral Consortium were in line with the main conference topics.

The Conference Forum papers were accepted after a careful evaluation process. Each paper was independently reviewed by at least two members of the international Program Committee of Baltic DB&IS 2022 Forum. Some papers were invited to the Forum as the result of conference papers' evaluation process. Altogether, there were 48 submissions for the conference and Forum, from which ten are included in the Forum volume. Six of these were recommended from the submissions to the main conference and the rest were selected from the papers directly submitted to the Forum. The 10 Forum papers present the authors' positions, innovative work in progress, and demonstrated innovative tools and applications.

The conference topics form five groups. The first group addresses Computer Science Models, Methods, Algorithms, and Tools for Digital Business. The second group concerns Knowledge and Knowledge Technologies for Digital Business and Intelligent Systems. The third group concerns IT Support for Digital Transformation. The fourth group concerns different perspectives on Artificial Agents and Smart Systems for Digital Business. Finally, the fifth group goes under the umbrella topic heading of Data, Data Science, and Computing for Digital Business and Intelligent Systems. The Baltic DB&IS Forum 2022 papers address practically all main topics of the conference and range from theoretical papers on conceptual and system theory issues to practice-oriented research that concerns, for instance, testing.

We are grateful to the reviewers and Doctoral Consortium mentors for their thorough evaluation and support. We thank all authors for their submissions, regardless whether their work was selected or not, and presentations.

July 2022

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