

Call for Papers

4–6 July 2022, Riga, Latvia



The 15th International Baltic Conference on Digital Business and Intelligent Systems

is a continuation of the biennial International Baltic conference on Databases and Information Systems (Baltic DB&IS) held since 1994. Inheriting the scope of the previous editions of the conference series, the Baltic DB&IS 2022 conference focuses on the advances of computer science in digital business and intelligent systems and provides a rich environment for exchanging research findings and ideas among scientists, practitioners, and doctoral students from the Baltic Sea region, Europe, and the rest of the world.

Conference Scope

Baltic DB&IS 2022 welcomes original unpublished contributions that have not been reviewed elsewhere. The topics of the contributions include, but are not limited to:

Computer Science Models, Methods, Algorithms, and Tools for Digital Business:

- Digitalization in Enterprise Ecosystems
- Business Process Management, Automation, and Simulation-based Optimization
- Advanced Socio Cyber Physical Systems
- Web Information Systems and Web Engineering
- Digital Humanities and Cultural Heritage
- Digitalization in Healthcare
- Digitalization in Education
- Digitalization in Agriculture and Forestry
- Smart Cities
- Computational Biology
- E-governance and E-commerce

Knowledge and Knowledge Technologies for Digital Business and Intelligent Systems:

- Machine Learning
- Information Retrieval
- Knowledge Graphs, Semantic Web, and Semantic Technologies
- Open Data and Linked Data
- Natural Language Processing
- Perception and Cognitive Systems
- Advanced Knowledge Management
- Research Methods in Computer Science and Information Systems Engineering
- Computational Thinking for STEM and Engineering Education

IT Support for Digital Transformation:

- Approaches for Digital Transformation
- Requirements Engineering for Digital Transformation
- Software and Data Quality Systems
- Advanced Computer Networks
- Risk and Security Management and Fraud Detection
- Recommender Systems

Artificial Agents and Smart Systems for Digital Business:

- Artificial Agents and Human-computer Interaction
- Artificial Intelligence and Machine Vision
- Intelligent Methods for Cybersecurity, Robotics, and Smart Industrial Systems
- Intelligent Platforms and Infrastructures for Digital Business
- Evidence Based Systems

Data, Data Science, and Computing for Digital Business and Intelligent Systems:

- Computational Modeling
- Algorithms and Software for Quantum Computers
- Knowledge-based Computing
- Uncertainty Handling in Computing
- Data Storage, Mining, and Analytics
- Big Data, Temporal Data, Geospatial Data

Important Dates

Conference paper submission:	2 March 2022
Doctoral Consortium paper submission:	9 March 2022
Notification to authors:	6 April 2022
Doctoral Consortium:	3 July 2022
Conference:	4-6 July 2022



<https://dbis2022.lu.lv>

Publications

Papers accepted by the conference will be published in the Springer CCIS series proceedings indexed by Scopus.

Extended versions of selected papers will be invited for submission to the following journals indexed by Clarivate Analytics Web of Science and Scopus: *Informatica*, *ComSIS*, and *Baltic Journal of Modern Computing*.



Scopus®



Clarivate
Analytics
WEB OF SCIENCE™

Submissions

Submission types: Full research papers 12-16 p. short communications 6-11p., Doctoral Consortium papers 6-8 p.
Submission format: Springer LNCS <https://www.springer.com/gp/computer-science/lncs/conference-proceedings-guidelines>
Submission site: <https://easychair.org/conferences/?conf=balticdbis2022>

Organization

Conference Chair

Juris Borzovs, *University of Latvia, Latvia*

Program Committee Co-chairs

Mirjana Ivanovic, *University of Novi Sad, Serbia*
Marite Kirikova, *Riga Technical University, Latvia*
Laila Niedrite, *University of Latvia, Latvia*

Program Committee

Rajendra Akerar, *Western Norway Research Institute, Norway*
Andris Ambainis, *University of Latvia, Latvia*
Guntis Arnicans, *University of Latvia, Latvia*
Mikhail Auguston, *Naval Postgraduate School, USA*
Liz Bacon, *Abertay University, UK*
Stefano Bonnini, *University of Ferrara, Italy*
Dominik Bork, *TU Wien, Austria*
Antoine Bossard, *Kanagawa University, Japan*
Sjaak Brinkkemper, *Utrecht University, Netherlands*
Robert Andrei Buchmann, *Babeş-Bolyai University of Cluj Napoca, Romania*
Emma Chavez Mora, *Universidad Catolica de la Santisima Concepcion, Chile*
Christine Choppy, *Université Paris, France*
Bhawani Shankar Chowdhry, *Mehran University of Engineering & Technology, Pakistan*
Darren Dalcher, *Lancaster University, UK*
Gintautas Dzemyda, *Vilnius University, Lithuania*
Dale Dzemydiene, *Vilnius University, Lithuania*
Olga Fragou, *Hellenic Open University, Greece*
Flavius Frasinca, *Erasmus University Rotterdam, Netherlands*
Wojciech Froelich, *University of Silesia, Poland*
Johann Gamper, *Free University of Bozen-Bolzano, Italy*
Shahram Ghandeharizadeh, *University of Southern California, USA*
Aditya Ghose, *University of Wollongong, Australia*
Giovanni Giachetti, *Universidad Tecnológica de Chile INACAP, Chile*
Oscar González-Rojas, *Universidad de los Andes, Colombia*
Janis Grabis, *Riga Technical University, Latvia*
Modris Greitans, *Institute of Electronics and Computer Science, Latvia*
Janis Grundspenkis, *Riga Technical University, Latvia*
Saulius Gudas, *Vilnius University, Lithuania*
Hele-Mai Haav, *Tallinn University of Technology, Estonia*
Hyoil Han, *Illinois State University, USA*
Nisim Harel, *Holon Institute of Technology, Israel*
Igor Hawryszkiewicz, *University of Technology Sydney, Australia*
Delene Heukelman, *Durban University of Technology, South Africa*
Hannu Jaakkola, *Tampere University, Finland*
Matthias Jarke, *RWTH Aachen University, Germany*
Cengiz Kahraman, *Istanbul Technical University, Turkey*
Diana Kalibatiene, *Vilnius Gediminas Technical University, Lithuania*
Keiichi Kaneko, *Tokyo University of Agriculture and Technology, Japan*
Dimitris Karagiannis, *Vienna University, Austria*
Ella Kolkowska, *Örebro University School of Business, Sweden*
Arne Koschel, *HS Hannover, Germany*
Michael Lang, *National University of Ireland, Galway, Ireland*
Dejan Lavbič, *University of Ljubljana, Slovenia*
Egons Lavendelis, *Riga Technical University, Latvia*
Innar Liiv, *Tallinn University of Technology, Estonia*
Christoph Lofi, *TU Delft, Netherlands*

Baltic DB&IS 2022 is being prepared as a physical event held in Riga, with support for your virtual participation.

See you in July in Riga!

Audrone Lupeikiene, *Vilnius University, Lithuania*
Hui Ma, *Victoria University of Wellington, New Zealand*
Jorge Martinez-Gil, *Software Competence Center Hagenberg, Austria*
Saulius Maskeliunas, *Vilnius University, Lithuania*
Raimundas Matulevicius, *University of Tartu, Estonia*
Vera Miguéis, *University of Porto, Portugal*
Timo Mäkinen, *Tampere University, Finland*
Charles Møller, *Aalborg University, Denmark*
Christophoros Nikou, *University of Ioannina, Greece*
Jyrki Nummenmaa, *Tampere University, Finland*
Jacob Nørbjerg, *Copenhagen Business School, Denmark*
Vladimir Oleshchuk, *University of Agder, Norway*
Jens Myrup Pedersen, *Aalborg University, Denmark*
Dana Petcu, *West University of Timisoara, Romania*
Jaroslav Pokorný, *Charles University, Czech Republic*
Jurģis Poriņš, *Riga Technical University, Latvia*
Jolita Ralyté, *University of Geneva, Switzerland*
Tarmo Robal, *Tallinn University of Technology, Estonia*
Ben Roelens, *Ghent University, Netherlands*
José Raúl Romero, *University of Cordoba, Spain*
Kamel Roibah, *College of Business Administration, Kuwait*
Colette Rolland, *Paris 1 Panthéon-Sorbonne University, France*
Gunter Saake, *University of Magdeburg, Germany*
Kurt Sandkuhl, *University of Rostock, Germany*
Ugis Sarkans, *EMBL-EBI, UK*
Mihails Savrasovs, *Transport and Telecommunication Institute, Latvia*
Ulf Seigerroth, *Jonkoping University, Sweden*
Khurram Shahzad, *University of the Punjab, Pakistan*
Michal Smialek, *Warsaw University of Technology, Poland*
Piotr Soja, *Cracow University of Economics, Poland*
Josep Sole-Pareta, *Polytechnic University of Catalonia, Spain*
William Wei Song, *Dalarna University, Sweden*
Larry Stapleton, *Waterford Institute of Technology, Ireland*
Agnis Stibe, *Métis Lab, EM Normandie Business School, France*
Janis Stirna, *Stockholm University, Sweden*
Vjeran Strahonja, *University of Zagreb, Croatia*
Chrysostomos Stylios, *University of Ioannina, Greece*
Kuldar Taveter, *University of Tartu, Estonia*
Bastian Tenbergen, *State University of New York at Oswego, USA*
A Min Tjoa, *Vienna University of Technology, Austria*
Ahto Truu, *Guardtime AS, Estonia*
Olegas Vasilecas, *Vilnius Gediminas Technical University, Lithuania*
Damjan Vavpotič, *University of Ljubljana, Slovenia*
Mathias Weske, *University of Potsdam, Germany*
Markus Westner, *Ostbayerische Technische Hochschule Regensburg, Germany*
Matthias Wilšotzki, *Hochschule Wismar, University of Applied Sciences, Technology, Business and Design, Germany*
Robert Wrembel, *Poznan University of Technology, Poland*
Eric Yu, *University of Toronto, Canada*
Jelena Zdravkovic, *Stockholm University, Sweden*
Milan Zdravković, *University of Nis, Serbia*
Iryna Zolotaryova, *Simon Kuznets Kharkiv National University of Economics, Ukraine*

Venue

The International Baltic DB&IS 2022 conference will take place in Riga, the capital of Latvia, whose picturesque medieval Old Town is known around the world for its well-preserved completeness and authentic Hanseatic architecture.

<https://dbis2022.lu.lv>