

Sunday, June 30

14.00-15.00 Registration

15.00-15.30 Opening of the Doctoral Consortium

15.30-16.15 Doctoral Consortium Keynote by Justyna Berniak-Woźny

“Navigating the Doctoral Journey – Insights, Challenges, and Strategies for Success”

16:15-16:45 Doctoral Consortium Session I

Chair: Tarmo Robal

- Automated data transformation in the execution of ETL operations in the aviation-technical industry

Maksim Pivovarov

16.45-17.15 Coffee Break

17.15-18.30 Doctoral Consortium Session II

Chair: Diana Kalibatiene

- Implementation Framework for Hyperloop Decision-Making Ecosystem

Aleksejs Vesjolijs

- Multi-Agent System for Facility Location Problem

Sathutha Piripun Sellapperuma

19.00-22.00 Welcome party

Address: Gedimino av. 9

Monday, July 1

8.00-9.00 Registration

9.00-9.30 Opening of the 16th Baltic DB&IS Conference

9.30-10.30 Keynote by Schahram Dustdar “Towards Active Inference

for Distributed Intelligence in the Computing Continuum”

10.30-11.00 Coffee Break

11.00-12.30 Session 1 “Models, Methods, and Tools for Digitalization I”

Chair: Juris Borzovs

- Exploring Goal Relationships in Satellite Assembly Line Design

Anouck Chan, Thomas Polacsek and Stéphanie Roussel

- Eco-Conscious Software Development: A Comprehensive Guide for Sustainable Practices

Ryan Vernex and Rébecca Deneckère

- Towards a New Method for Designing Manufacturing Capabilities
Anouck Chan, Janis Stirna, Jelena Zdravkovic, Thomas Polacsek, Simon Hacks, Jānis Grabis and Claudio Favi

12.30-13.30 Lunch

13.30-14.30 Keynote by Maribel Yasmina Santos “Unlocking Insights: Empowering Decision-Making in Data-Driven Environments”

14.30-15.30 Session 2 “Models, Methods, and Tools for Digitalization II”

Chair: Jānis Grabis

- Indoor Environmental Quality Data Measurement, Management and Analysis: First Draft of the Conceptual Model
Guntis Arnicans and Laila Niedrite
- Using the Concept of Accommodation to Facilitate Problem-Solution Analysis
Anders W. Tell, Erik Perjons and Martin Henkel

15.30-16.00 Coffee Break

16.00-17.30 Session 3 “Knowledge and Knowledge Technologies for DB&IS”

Chair: Jānis Grundspenķis

- Toward Federated Learning Through Intent Detection Research
Daiga Deksnė, Jurgita Kapočiūtė-Dzikiėnė and Raivis Skadiņš
- Future Directions in Defence NLP: Investigating Research Gaps for Low-Resource Languages
Vitalijs Teze and Erika Nazaruka
- European Union’s Legislative Proposals Clustering Based on Multiple Hidden Layers Representation
Eya Hammami and Rim Faiz

18:30-20.30 Vilnius Tour

20:00 Steering Committee Meeting

Tuesday, July 2

8.00-9.00 Registration

9.00-10.00 Keynote by Sjaak Brinkkemper “Reducing the Administrative Burden in Healthcare: Ontological Conversation Interpretation for Generative Medical Reporting”

10.00-10.30 Coffee Break

10.30-11.30 Session 4 “Emerging Technologies and Innovation for Digital Business”

Chair: Janis Stirna

- Blockchain-Driven Secure Auditing of Timber-to-Charcoal Supply Chain
Mubashar Iqbal, Muhammad Zubair, Sabah Suhail, Faiz Ali Shah and Fredrik Milani
- Evaluation of Methods for User Needs Extraction in Digital–Physical Product Ecosystems Using ChatGPT Text Categorization
Alberts Pumpurs and Jānis Grabis

11.30-12.30 Session 5 “Emerging Technologies and Innovation for Digital Business”

Chair: Rébecca Deneckère

- Network Topology Based Identification and Analysis of Security Threats in Data Centres
Jānis Kampars, Guntis Mosāns and Jānis Grabis
- Teaching Rapid Application Development Skills for Digitalisation Challenges
Tarmo Robal, Uljana Reinsalu, Janika Leoste, Lembit Jürimägi and Risto Heinsar

12.30-13.30 Lunch

13.30-15.15 Session 6 “Data, Data Science, and Computing for DB&IS”

Chair: Guntis Arnicans

- Crop Hyperspectral Dataset Unmixing Using Modified U-Net Model
Vytautas Paura and Virginijus Marcinkevičius
- Evaluation of Deep Learning-Based Models for Recognition of Skydiving Formations
Algimantas Skuodis and Olga Kurasova
- Comparative Analysis of Various Data Balancing Techniques for Propaganda Detection in Lithuanian News Articles
Ieva Rizgeliēnē and Gražina Korvel
- Synthesizing Vibration Signals Using Generative Adversarial Networks
Tadas Žvirblis and Donatas Pučinskas

15.30 Excursion to Vilnius University

Address: Universiteto st. 3

18.30 Bus to Conference Dinner (at Daukanto Square)

19.00 Conference Dinner

Wednesday, July 3

8.00-9.00 **Registration**

9.00-10.00 **Keynote by Raimundas Matulevičius** “Information Security in Digital Business and Intelligent Systems”

10.00-10.30 **Coffee Break**

10.30-12.30 **Forum Session 1**

Chair: Virginijus Marcinkevičius

- Transforming Chronic Disease Therapy with Telemedicine: A Single Case Study of Integrated Clinical Pathways for COPD Management Employing Telemedicine Technologies and BPM Methods
Marek Szelągowski, Justyna Berniak-Woźny
- The Role of Digital Transformation for SMES During a Health Crisis: Lessons Learnt from Covid-19 Epidemic
Ourania Areta Hiziroglu, Ali Emre Aydin, Karel Van Isacker, George Milis, Hristo Sirashki, Panayiotis Tsoris
- Towards Simplifying the Use of Self-Services
Kaspars Kalnins, Marite Kirikova
- Human Intelligence vs Artificial Intelligence: Secondary Term Creation in Information and Communication Technology Field
Dace Šostaka, Juris Borzovs, Jānis Zuters
- Towards Validation of Insider Threat Identification Algorithm with Synthetic Data
Oksana Nikiforova, Vitaly Zabiniako

12.30-13.30 **Lunch**

13.30-15.00 **Forum Session 2**

Chair: Saulius Maskeliūnas

- Literature Review of Explainable Machine Learning in Real Estate
Arnis Staško, Jānis Grundspeņķis
- An In-Depth Case Study of Volkswagen's AI Integration
Ali Mert Erdođan, Ourania Areta Hiziroglu, Abdulkadir Hiziroglu
- Vendor News Analytics
Anup Bera, Sujaya Kundu

15.00-15.30 **Closing**

16.00 **Bus to Historical Tour to Trakai** (at Daukanto Square)