

# RaTSiF-2023

The 44<sup>th</sup> Research and Technology – Step into the Future Conference

## Agenda

**Date:** 8<sup>th</sup> December 2023

**Time:** 10:00 – 17:00

**Location:** Transport and Telecommunication Institute

### PLENARY SESSION (Aud. 130)

Link to Plenary Session: <https://meetings.tsi.lv/b/jel-b2j-v8m-x92>

| PLENARY SESSION    |   |  |
|--------------------|---|--|
| <b>Moderators:</b> | <b>Prof., Dr.oec. Inna Stecenko</b><br><b>Prof., Ph.D. Emmanuel Merchan</b> |  |
| 10:00 – 12:00      | Welcome Speech  | <b>Prof., Dr.sc,ing. Irina Yatskiv (Jackiva)</b><br>Chairwoman of the Board<br>Chief Executive Director, Transport and Telecommunication Institute, TSI (Latvia) |
|                    | Quantum Computing: Advancements and Challenges                              | <b>Ph.D. Raqueline Azevedo Medeiros Santos</b><br>Researcher at the Center for Quantum Computing Science, Faculty of Computing, University of Latvia             |
|                    | Leveraging Data and AI to Shape Competitive Value Propositions              | <b>Asst.Prof., Dr.sc.ing., Olga Zervina</b><br>Transport and Telecommunication Institute, TSI (Latvia)   |
|                    | Socratic Method for Prompt Engineering – New Teaching Design                | <b>Prof., Dr.sc.ing. Boriss Misnevs</b><br>Transport and Telecommunication Institute, TSI (Latvia)   |
| <b>Break</b>       |   |  |

## Parallel Session

SESSION #1 (Aud. 130)

Link to Session #1: <https://meetings.tsi.lv/b/jel-hv9-sba-3r0>

| COMPUTER PROBLEMS OF THE INFORMATION SOCIETY<br>AND THE MODERN ELECTRONICS<br>INFORMĀCIJAS SABIEDRĪBAS DATORIZĀCIJAS PROBLĒMAS<br>UN MŪSDIENU ELEKTRONIKA |   |                    |
|---|---|--------------------|
| 12:30 – 16:45   |   |                    |
| Moderators:   | Prof., Dr.sc.ing. Dmitry Pavlyuk<br>Prof. Dr.sc.ing. Boriss Misnevs                             |                    |
| 12:30 – 14:30   | VPN Obfuscation Methods   | Andris Začs        |
|   | Container Orchestration Platform Challenges on Kubernetes Example                               | Junaid Ahmed       |
|   | Application of Reinforcement Learning Methods for Test Case Prioritization                      | Oskars Koleda      |
|   | Stereoscopic Dataset Extraction on Fish Behavior from Video Recordings                          | Jurijs Malahovs    |
|   | Reconstruction of Hidden Parts of Human's Face in Face Recognition Problems ( <i>online</i> )   | Evgeny Tenenbaum   |
| 14:30 – 14:45   | Break   |                    |
| Moderators:   | Prof., Dr.sc.ing. Mihails Savrasovs<br>Prof., Dr.sc.ing. Irina Pticina                          |                    |
| 14:45 – 16:45   | Application of AI For Support Task Processing in a Multisystem Environment                      | Ilja Pozdejevs     |
|   | Agile Implementation Issues in Software Development at Public Sector in Latvia                  | Olga Gorgijoska    |
|   | Hilbert Transform Based Non-Data-Aided Carrier Offset Estimation Method ( <i>online</i> )       | Vladimirs Skļarovs |
|   | The Influence of Big Data-Driven Decision-Making on Financial Project Success ( <i>online</i> ) | Dairis Useniēks    |
|   | Securing the Future of Remote Work: Novel Cyber Threat Mitigation Strategies ( <i>online</i> )  | Jana Kudinova      |

## Parallel Session

SESSION #2 (Aud. I)

Link to Session #2: <https://meetings.tsi.lv/b/jel-p3a-pon-x0q>

| 12:30 – 14:15 |   | TRANSPORT AND LOGISTICS<br>TRANSPORTS UN LOGISTIKA |
|---------------|---|--|
| Moderators:   | Prof., Dr.sc,ing. Irina Yatskiv (Jackiva)<br>Assoc. Prof., Dr.sc.ing. Gennady Gromov                                    |  |
| 12:30 – 14:15 | Contemporary Logistics Services Procurement Process: Industry Data Based Model  | Aleksandrs Kotlars and Valerijs Skribans           |
|               | Artificial Intelligence in Supply Chain Management in India   | Ahammed Shaheen Alangadan                          |
|               | Aspects of Sustainable Transportation in Military Logistics ( <i>online</i> )   | Inga Lencēviča                                     |
|               | Impact of Data Processing and Interpretation of Smart Containers on Enhancing Supply Chain Efficiency ( <i>online</i> ) | Jelena Kudrjavceva                                 |
| 14:15 – 14:30 | Break   |  |

## Parallel Session

### SESSION #3 (Aud. I)

Link to Session #3: <https://meetings.tsi.lv/b/jel-dpj-pxb-yel>

| <b>MARKET: RESEARCH, PROJECTS, TECHNOLOGIES AND PROBLEMS<br/>OF THE MODERN ECONOMY AND BUSINESS</b><br><b>TIRGUS: PĒTĪJUMI, PROJEKTI, TEHNOLOĢIJAS UN MŪSDIENU EKONOMIKAS<br/>UN BIZNESA PROBLĒMAS</b> |   |                         |
|--|---|-------------------------|
| <b>14:30 – 17:00</b>   |   |                         |
| <b>Moderators:</b>   | <b>Prof., Dr.oec. Irina Kuzmina-Merlino</b><br><b>Asst. Prof., Ph.D. Berdymyrat Ovezmyradov</b>               |                         |
| <b>14:30 – 17:00</b>   | Development of Business Model for Low-Cost Carrier Utilizing Regional Cargo Aircraft                          | Toms Sakalausks         |
|  | Improvement of Fatigue Management Methodologies Related To Flight Crew  | Sofija Alomara          |
|  | The Integration of Artificial Intelligence in Management of Airline Operations Control Center (OCC) Processes | Christy Oommen<br>Jacob |
|  | Importance of Customer Communication in E-Commerce  | Taley Muhammad          |
|  | Training and Development for Enhancing Employee Performance in the Hotel Industry                             | Sandeep Verma           |
|  | Process Optimization Through Lean Management in an Aircraft Maintenance Organization ( <i>online</i> )        | Nikita Lairand          |
|  | Risk and Threat Mitigation for Civil Aviation Flights over and near Conflict Zones ( <i>online</i> )          | Bexultan Zhailybayev    |
|  | Resilience in the Airline Industry: Key Factors for a Successful Airline Business in Crisis ( <i>online</i> ) | Stefan Bonhardt         |