RaTSiF-2026

The 50th Research and Technology – Step into the Future Conference

Agenda

Date: 27th November 2026
Time: 10:00 – 18:00
Location: Transport and Telecommunication Institute
Link to Plenary Session: https://meetings.tsi.lv/b/jel-9xg-7tu-c5b

PLENARY SESSION Aud. 130		
Moderators:	**Prof., Dr.sc.ing., Dmitry Pavlyuk**	
10:00 – 12:00	Welcome Speech	**Mihails Savrasovs,** Dr.sc.ing., Professor, Rector, TSI (Latvia)
	Improving Aircraft Airworthiness by Optimising the Logistics and Spare Parts Supply	**Abdulali Bagiyev,** BSA, MLSCM.,Ph.D candidate, Researcher, TSI, (Latvia)
	Rethinking Learning Outcomes for the Fifth-Generation University	**Boriss Misnevs,** Dr.sc.ing., Professor, TSI (Latvia)
	Who Will Become Tomorrow's Experts in the Age of AI? Engineering Human–AI Collaboration, Professional Expertise, and the Next Generation of Engineers	**Maksim Ilin,** MG.SC.CS.,Ph.D candidate, Researcher, TSI, (Latvia)

Parallel Session

SESSION # 1 Part 1 (Aud. 130)

Link to Session: https://meetings.tsi.lv/b/jel-juv-oar-xrv

Online: Only for Distant Learning Students

12:30 – 17:00	**INFORMATION SOCIETY & ELECTRONICS INFORMĀCIJAS SABIEDRĪBA UN ELEKTRONIKA**	
Moderators:	**Prof., Dr.sc.ing., Mihails Savrasovs Prof., Dr.sc.ing., Irina Pticina Prof., Dr.sc.ing., Dmitry Pavlyuk**	
12:30 –14:30	Dynamic and Cost-Aware Machine Learning for Regression Test Case Prioritization in CI/CD Pipelines	Jeena George
	Cross-Layer Context for LLM-Based Detection and Root-Cause Analysis of Configuration Anomalies in AWS Lambda: An Ablation Study	Khaoula Khazri
	Resource-Efficient Fake News Detection with Limited Labelled Data	Jeswin Johnson
	Improving Maintainability of MLLM-Generated Flutter UI Code Using Compiler and AST-Based Feedback Loops	Sunali Rambukwella smila
	Evaluating the Trade-Off between Prediction Accuracy and Explainability in Retail Sales Forecasting Models	Shehani Fernando
	Evaluating Object Hallucination in Vision Language Models Using MLOPS Frameworks	Ranasinghe Arachchige Don Hiruna Gayashan Ranasinghe
	Developing a Framework for Evaluating Customer Experience in Digital Information Systems	Zaman Faizal
	A Model-Based Quality Assurance Approach for AI-Enhanced Digital Procurement Systems	Tharushika Prabhathi Ethdath Waduge online
14:30 – 14:45	**Break**	

14:45 – 17:00	An AI Readiness Framework for Manufacturing Quality Management Systems in the Industry 4.0 Era	Lahiru Sandakelum Fernando Madawanage
	Development of a Modular Mobile Robot with Machine Learning for Plant Health Analysis in Private Gardens	Artjoms Čubs, Nikole Hristolubova and Maksims Sukonnikovs
	When Survival-Critical Memory Hurts Cooperation: An Exploratory Study of Experience Inheritance	Dmitrijs Gavrilovs
	AI Adoption Frameworks in European SMEs: Challenges and Business Value Measurement	Fathimathul Ashmila Thathanampalli
	Development and Evaluation of an Automated API Quality Assessment Framework	Sharip Muzhikpayev
	Risk Governance in Railway Freight Transportation A Case Study of Kerala	Ajugonyi Ekwebe Phelim
	An Empirical Evaluation of AI-Driven Test Prioritisation for Agile Continuous Integration	Chathuki Dilrangi Withana Arachchige
	Design And Evaluation of a Dual-Graph Accounting Architecture for AI Agents	Jevgenijs Ostapkovics online
	Cybersecurity Controls for Small Business: Balancing Risk and Investment	Irina Karlovska online

Parallel Session

SESSION # 1 Part 2 (Aud. 220)

Link to Session: https://meetings.tsi.lv/b/jel-xfw-jlu-zyf

Online: Only for Distant Learning Students

12:30 –14:30	**INFORMATION SOCIETY & ELECTRONICS INFORMĀCIJAS SABIEDRĪBA UN ELEKTRONIKA**	
Moderators:	**Prof., Dr.sc.ing. Aleksandrs Grakovkis Assoc. Prof., Dr.sc.ing. Samuel Moveh**	
12:30 –14:30	Design and Experimental evaluation of the EEDS Framework: An Embedded Edge AI Decision Support Framework for Smart Greenhouse Environmental Monitoring	Chamin Ridmal Kodikara
	Togetherway: Design and Evaluation Framework for a Multilingual Newcomer Support Platform	Vladimir Lencmanis, Mufazzalshokh Ulashev, Benni Christober C and Mert Pehlivan
	Closed-Loop Multi-Agent Architecture for Predictive Risk Detection and Dynamic Task Dependency Optimization	Jefin Jose
	Evaluating Context-Aware AI-Assisted Technical Debt Prioritization in Large-Scale Software Systems	Narapiti Mudiyanselage Thaarindu Rewatha
	Development a Gantry Robot for Dispensing Eggs to Employees	Iļja Ežkovs, Polina Belokoņa, Dmitrijs Finogenovs, Aleksandrs Muhins, Evelīna Rasiņa
	Assessing the Robustness of TrustMark Invisible Image Watermarking under Sequential Image Processing	Juliana Dubecka
	Research of a Computationally Efficient Spherical Panorama Reconstruction Method for a Fixed Multi-Camera Smart Helmet System	Evgeny Tenenbaum
	Offline Programming and Trajectory Optimisation Software for Robotic Welding Cells	Vasilijs Vilks, Igors Volohovs, Timofejs Oniscuks, Aleksandrs Binders, Ksenija Derune
	Cognitive Challenge in Transport and Logistics: Opportunities for Cognitive Occupational Exoskeleton Adoption	Sergejs Paskovskis online
	Optimizing Maintenance Management Strategy on Land RIGS Using Reliability Techniques for Rotating Equipment (Compressors) in the Nigerian Oil and Gas Industry	Onoja Adole
14:30 – 14:45	**Break**	

Parallel Session

SESSION # 2 (Aud. I)

Link to Session: https://meetings.tsi.lv/b/jel-d1c-g73-kyq

Online: Only for Distant Learning Students

12:30 – 18:00	**TRANSPORT AND LOGISTICS TRANSPORTS UN LOĢISTIKA**	
Moderators:	**Prof., Dr.sc.ing. Irina Yatskiv Assoc. Prof., Dr.sc.ing. Evelina Budilovich Assoc. Prof., Dr.sc.ing. Aleksandrs Kotlars**	
12:30 –15:00	Assessing the Economic and Policy Feasibility of Compressed Natural Gas Vehicles in Delhi's Logistics Sector under India's National Clean Air Programme	Anandu Surendralal
	Kross-dokinga termināļa darbības analīze, izmantojot simulācijas modelēšanu	Jeļizaveta Kaļņicka
	Risk Governance in Railway Freight Transportation. A Case Study of Kerala	Ajaya Kumar Chandralekha Anand
	Multi-Criteria Decision-Making Model for Selecting Low-Emission Freight Transport Technologies	Ajesh Rajesh
	Open Source GIS Routing for Last Mile Deliveries in Kochi	Shebin Punnakuzhiyil Jolly
	Towards Multi-Objective Optimisation of Human–AI Task Allocation in Transport and Logistics Public Procurement Preparation	Viktors Jankovskis
	Comparative Analysis of Operational Efficiency and Environmental Sustainability in Air Cargo Transport at Madurai and Chennai Airports, India	Yagul Selvendran Nagarajan
	The Economic Value of Travel Time Reliability Improvements Enabled by Intelligent Transport Systems (with a Focus on User Welfare and Demand-Side Effects)	Jerish Chacko George
	Comparative Assessment and Strategies for Inclusive Transport Planning: A Case Study of Riga, Tallinn, and Stockholm	Abid Mukthar Ottakkandathil Puthenpeedikakkal Chennengal

	Evaluation of a Centralized Tool Warehouse for a Long-Haul Point-To-Point Airline	Valters Bitmanis
	Operationalising Transport Resilience: A Decision-Support Approach to Mission-Critical Road Traffic Deconfliction under Uncertainty	Inga Lenceviča online
15:00 – 15:15	**Break**	
15:15 – 18:00	Assessing Passenger Connection Risk at Major Airport Hubs Using Predictive Delay Analytics and Simulation	Ponnarasu Selvam
	A Comparative Analysis of Freight Transport and Logistics Strategies: A Case Study of India and Germany	Shine Varghese
	Modelling the Transition of Logistics Service Providers to Green Transport Services	Mohamed Safvan Cheru Kalyapurathchembayil
	Rail Network Routing Strategies for TEN-T Core Network Corridors	Midhun Raj Rajesh Kumar
	Comparative Study of Rail Freight Modal Share and Its Economic Impact India vs Germany	Adityan Chettiparambil Anilkumar
	Physical Internet-Inspired Urban Freight Network Design and Evaluation: Case of Riga	Muhammed Nihal Parayangchalil
	Smart Warehouse Layout Using Open Source Cad and Simulation Tools	Boney Wilson
	Resilience-Oriented Planning of Emergency Rail Routes in the Baltic Rail Network	Muhammed Faseeh Karyakath
	The Impact of Carbon Pricing on the Generalised Cost of Transportation	Alen Babu
	Statistical Benchmarking of Urban Freight Transport Performance in European Cities: A Comparative Framework for Riga	Naveen Kumar Kandhasamy

Parallel Session

SESSION # 3 (Aud. 703)

Link to Session: https://meetings.tsi.lv/b/jel-dqg-pul-aio

Online: Only for Distant Learning Students

12:30 –14:45	**AVIATION MANAGEMENT, SAFETY AND OPERATIONS AVIĀCIJAS VADĪBA, DROŠĪBA UN OPERĀCIJAS**	
Moderators:	**Prof., Dr.sc.ing. Iyad Alomar Assist. Prof., Dr.sc.ing. Pavithra Nagaraj**	
	Medfly: An Instrumented Capsule for Verified Cold-Chain Last-Mile Medical Delivery	Aysha Sheza Hikmath Hilal, Elif Yagici, Ece Aydin, Akhil George, Alwin K. Soney, Ender Turkoz , Maneesh Benny, Ceylin Yagici, Shanthan Babu Sangaraboina
	Predicted Thermal Detection, Search Coverage and Target Geolocation for a UAV Search and Rescue Aircraft: The Sarnav-1 Case Study	Abderrahman Kaissi
	Organisational Culture, Management Practices and Operational Pressures in Business Aviation Safety Decision-Making	Björn Wagner online
	Digital Twin Enabled Maintenance Strategy Optimisation for Sustainable Aviation MRO with MTBF And MTTR Approach	Emrah Arda Gürbüz
	Development of a Project Management Framework for AI Implementation in Airline	Vaidheeswaran Kannan
	Development of a Decision Support Framework for Advanced Air Mobility Operations in Hungary	Edmunda Dio Legendi
	Assessing the Feasibility and Acceptance of AI-Supported Dynamic Fatigue Risk Assessment among Airport Ground Handling Personnel	Irakli Gogelia
	Assessment of Fatigue Risk Factors and Fatigue Management Practices among Aircraft Maintenance Personnel	Diana Punane
	Development of Sustainable Human Resource Management Strategies in the Context of Shortage of Personnel in the Aviation Industry of Kazakhstan	Gulsana Saryyeva online

14:45 – 15:00	**Break**

Parallel Session

SESSION # 4 Part 1 (Aud. 222)

Link to session: https://meetings.tsi.lv/b/jel-szg-ndk-l4c

Online only for Distant learning students

12:30 – 17:00	**MARKET: RESEARCH, PROJECTS & MODERN BUSINESS TIRGUS: PĒTĪJUMI, PROJEKTI UN MŪSDIENU BIZNESS**	
Moderators:	**Prof., Dr.oec. Irina Kuzmina-Merlino Prof., Dr.oec. Inna Stecenko**	
	Socio-Economic Inclusion in the Age of Digitalization: Labor Market Vulnerabilities of Persons with Disabilities in Azerbaijan — A Conceptual Framework and Research Agenda	Natig Safarli
	What Do Leading Insurers Disclose about Artificial Intelligence and Cost Efficiency? A Comparative Review of Public Sources	Elshad Ismayilov
	Assessing Apartment Owners' Financial Understanding for Digitally Supported Renovation Decisions	Darja Ivanova
	Building a Sustainable Fashion Brand in Kerala's Retail Sector	Althaf Muhammed Paracheri Parambil
	Evaluation of Digital Transformation System in Azerbaijan	Nigar Huseynzade online
	Quantifying Airport Disruption Losses in the Digital Era: The Case of Italian Airports	Emanuele Marzoli online
	Trustworthy Human-AI Collaboration in Quality Decision-Making within Regulated Manufacturing	Josefine Hirte online
	Diversity and Representation in European Works Councils in the Digital Age	Steffen Loew online
14:30 – 14:45	**Break**	
	Assessing Meaningful Human Oversight in AI-Supported Financial Decisions	Mehak Gupta
	Exploring the Influence of AI-Driven Personalization on Booking Intentions in Online Travel Platforms	Sandip Bhimrao Kadbhane
	Leveraging Digital Innovation for Sustainable Logistics: A Comparative Analysis of Parcel Delivery Systems in Nigeria, Ghana, Benin Republic & Togo – A Case Study of the Baltics	Olusola Ademola

	A Strategic Sustainability Framework for Improving Competitive Advantage of Small and Growing Enterprises in the Electric Vehicle and Auto Components Manufacturing Industry of Tamil Nadu	Saravanan Singaram and Bhargav Vegi
	Assessing Port and Maritime Cluster Competitiveness: A Comparative Review of Research Approaches	Evgeniia Serebrennikova
	Trustworthy-AI Procurement as an Enabler of Hospital Digital Transformation	Jakob Hartmann online
	Nonlinear Effects of Digitalisation on International Trade: A Structured Review of Threshold and Heterogeneity Evidence	Farkhod Giyasov online

Parallel Session

SESSION # 4 Part 2 (Aud. 505)

Link to session: https://meetings.tsi.lv/b/jel-xhy-x3j-gsd

Online only for Distant learning students

12:30 – 17:00	**MARKET: RESEARCH, PROJECTS & MODERN BUSINESS TIRGUS: PĒTĪJUMI, PROJEKTI UN MŪSDIENU BIZNESS**	
Moderators:	**Dr.sc.administr., Prof. Yulia Stukalina Dr.sc.ing., Assoc. Prof. Olga Zervina**	
	Assessing the Role of a General Manager in Digital Transformation in the Turkish Manufacturing Sector	Asim Caglar Ballioglu
	Governing Sustainable Scholarly Communication: A Hybrid Ecosystem Approach	Iswanda F. Satibi
	Digital and AI-Enabled Sustainability Information in SMEs: Practice, Communication and Accountability	Aiman Jazar
	The Role of Social Media Marketing in Building Brand Loyalty in the Fashion Industry	Ashwin Arangassery Suresh

	AI in Banking: Literature Review	Kartikey Koti
	AI-Based Recruitment and Selection and Its Effects on Employee Experience	Oluwanifemi Awolola
	The Impact of Sales Promotion Strategies on Purchase Intention of Generation Z Consumers in the Apparel Retail Industry of India	Athul Anilkumar Swapna online
	Risk Management in AI-Driven Governance: Governance Gaps and Compliance Vulnerabilities in Anti-Money Laundering Systems in Financial Institutions	Milda Sirtautaite online
	Sustainable Finance Operations and Bank Performance in Nigeria: Evidence from NSBP Adoption and Bank Disclosures, 2010–2025	Oluwayemisi Juliana Anifowoshe online
14:30 – 14:45	**Break**	
14:45 – 17:00	Improvement of Corporate Culture as a Factor in the Growth of Competitiveness of an Organisation in Crisis	Rovshan Bakhshaliyev
	The Rise of AI Co-founders: Ethical and Strategic Implications of Human–AI Startup Teams in Kerala	Sam Thekkethottiyil Jose
	Factors Influencing Individual Investment Decision-Making: Towards A Technology-Supported Investment Assessment Framework	Olīvija Reiha
	The Factors That Influence International Students' Choice of European Universities	Muhammed Sheby
	Impact of Fintech Adoption on the Operational Efficiency of Indian Manufacturing SME'S	Robin Benoy
	The Impact of Virtual Try-on Technology on Consumer Purchase Intention in the Indian Fashion Industry	Sanjay Kerai Harishbhai
	The Impact of Brand Communication Authenticity on Consumer Trust in the Indian Beauty Industry	Jomina Jins
	Impact of Performance Appraisal Feedback on Employee Motivation in the Indian Manufacturing Industry	Antony Philip
	Digitalisation of Healthcare and Health Outcome In OECD and SSA Countries: A Comparative Study	Ojone Ishola, Oluwatoyin Mattew and Busayo Aderounmu