UNM FIŠ

CONFERENCE PROGRAMME

17th International Conference on Information Technologies and Information Society
ITIS 2026

Shaping Society 5.0 through Interdisciplinary AI, Sustainable Innovation, and Digital Ethics

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Faculty of Information Studies
Ljubljanska cesta 31a, 8000 Novo mesto, Slovenia

November 5 and 6, 2026

ITIS 26 11111101010

2026 mesec znanosti od leta 2016

unesco MOST Management of Social Transformations Programme National Committee

unesco Slovenian National Commission

SLAIF Slovenian AI Factory

REPUBLIC OF SLOVENIA MINISTRY OF EDUCATION, SCIENCE AND YOUTH

EuroHPC Joint Undertaking

PROJECT SRC-EDIH 2.0

MEMBER OF EDIH European Digital Innovation Hubs Network

CO-FINANCED BY Co-funded by the European Union

REPUBLIC OF SLOVENIA MINISTRY OF THE INTERIOR AND PUBLIC ADMINISTRATION

CONFERENCE PROGRAMME

17th International Conference on Information Technologies and Information Society

DAY 1 THURSDAY, 5 NOVEMBER 2026

08:30–09:15 **Registration and morning coffee**

09:15–09:30 **Opening speech: prof. dr. Matej Makarovič** — Alfa
Rector of the University of Novo mesto

09:30–10:30 **Plenary: prof. dr. Taha Yasseri** — Alfa
A New Sociology of Humans and Machines

10:30–11:00 Coffee Break

11:00–12:30 / PARALLEL SESSIONS

ALFA — AI in Organizations and Work

SLAIF session · Chair: Zoran Levnajić

Emergent Digital Leadership in Society 5.0: A Human-Centred Competency Framework
Nuša Erman, Zoran Đorđević

Regional and Company-Type Transferability of Machine Learning Models for Employee Absence Prediction
Peter Zupančič, Panče Panov

Topic Modelling of Slovenian Job Listings Using LDA and BERTopic
Robi Pritržnik, Biljana Mileva Boshkoska, Pavle Boškoski

Centralized Data Integration in a Custom Enterprise Resource Planning (ERP) System for Shopping Mall Asset and Operations Management: A Case Study Approach
Muhammad Faisal

BETA — Sustainable Development and Industry 4.0 in Europe*

Jean Monnet Module session

Industry 4.0 and Sustainable Development: A Double- Edged Sword?
Erika Džajić Uršič

Towards Creative Circularity: Applying Principles of Circular Economy to Creative Industries
Tamara Besednjak Valič

Approaches of a Circular Economy and Examples of Best Practices in Slovenia
Urška Fric

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DAY 1 THURSDAY, 5 NOVEMBER 2026

12:30–14:00 **Lunch at the venue**

14:00–15:00 **Plenary: prof. dr. Laura Trinchera (SLAIF session)** — Alfa
Shrinking, Projecting, Predicting: PLS Regression for High-Dimensional Data

15:00–16:30 / PARALLEL SESSIONS

ALFA — Networks, Collective Dynamics, and Machine Learning in Medicine

SLAIF session · Chair: Teja Štrempfel

Beyond the Static Network Plot: Assessing the Stability of Network Conclusions under Structural Perturbation
Nuša Erman

The emergence of collective mood dynamics leading to the manifestation of fractal-wave patterns by Ralph Nelson Elliott in agent-based social networks.
Oleg Mayorov, Biljana Mileva Boshkoska

Synthesis of Cardiorespiratory Coupling Dynamics for AI-Based Depression Detection
Albert Zorko

When Simpler Is Enough: Cross-Study Benchmarking of Machine-Learning Models for PDAC Transcriptomics
Matea Lukić, Dušan Ramljak, Tatjana Davidović, Milica Perišić Nanut, Biljana Mileva Boshkoska

BETA — Digital Society, Ethics and Culture

Chair: Kseniia Gromova

Public Perceptions of Artificial Intelligence from Survey Trends to Everyday Practices
Maruša Gorišek

Artificial Intelligence, Digital Ethics and the Preservation of Human Moral Agency in Transmodern Society
Dejan Jelovac

Digital Stories and Planetary Belonging: Narratives of Global Identity and Ecological Responsibility
Wiebke Drews, Tea Golob, Matej Makarovič, Albert Zorko

Whose Pixel Is That? Attribution of Generative-AI Image Regions to Their Source Artworks
Mohamed Abdel-Maksoud

16:30–17:00 Coffee Break

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DAY 1 THURSDAY, 5 NOVEMBER 2026

17:00–18:30 / PARALLEL SESSIONS

ALFA Automation, Measurement and Inspection

SLAIF session · Chair: Biljana Mileva Boshkoska

From Experiment Design to Results: An Integrated Platform for Laboratory Automation
Jure Kos

Physics-constrained Gaussian process for self-consistency check of electrochemical impedance spectrum
Žiga Gradišar, Pavle Boškoski

Intelligent Automation of 3D Scanning for Industrial Components
Vesna Pungerčar, Karel Cerovšek, Jakob Fabjan, Kusai Almahamid, Slavko Arh

From Space Weather to Transport Systems: A Conceptual Space-Weather-to-Transport Pathway Framework Applied to the May 2024 Space-Weather Event in the Slovenian Context
Valerij Grasic

BETA Quantum Technologies and Governance

Chair: Maruša Gorišek

Delineating Quantum Technologies: Taxonomic Fragmentation and Its Implications for Innovation Analysis
Karin Dobravc Škof, Janez Kolar, Beno Zupanc

When Policy Leads and When It Lags: Comparing Governance Timing in Artificial Intelligence and Quantum Technologies
Karin Dobravc Škof, Janez Kolar, Beno Zupanc

AI-Mediated Expectation Amplification: Does Grok Fuel Quantum Technology Hype on X?
Wiebke Drews, Pedro Maia

Securing Society 5.0: Integrating Post-Quantum Cryptography into Enterprise Web Backends
Srdjan Skrbic

19:30 Social dinner at Hotel Dolenj'c restaurant

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ITIS 26

VŠM FIŠ

DAY 2 FRIDAY, 6 NOVEMBER 2026

09:30–10:30 **Keynote: prof. dr. Marija Mitrović Dankulov** — Alfa
Collective Behaviour in Human and Artificial Societies

10:30–11:30 **Keynote: prof. dr. Miloš Ivanović** — Alfa
Teaching Neural Networks the Laws of Nature: Solving Inverse Problems and Uncertainty in Scientific Computing

11:30–12:00 Coffee Break

12:00–13:30 / PARALLEL SESSIONS

ALFA — AI in Education and Literacy

Chair: Tea Golob

Data, Visibility, and Power: How Educational E-Administrative Platforms Reconfigure Educational Inequality
Lorena Mihelač

Predicting secondary school teachers' readiness to integrate Generative Artificial Intelligence: A Random forest and SHAP analysis
Petra Jačimović Dostal

Generative AI in Excel: Skill equalization or illusion of competence?
Davor Švajger, Andrej Dobrovoljc

Digital Marketing Communication as a Missing Component of Digital Media Literacy in Data-Driven Media Environments
Mateja Rek

BETA — Sustainability and Infrastructure Applications

EDIH 2.0 session · Chair: Mateja Lesar

Digitalization and AI Adoption in Slovenian SMEs for Sustainable Development
Lejla Imamovic Leric, Nadia Molek, Annmarie Gorenc Zoran

The Role of Digital Technologies and Information Exchange in Advancing the Circular Economy
Milica Stanković, Gordana Mrdak, Jovana Džoljić, Stevan Simić

Scalable Digital Twin Framework for Fleet-level Performance Assessment of a Wind Power Plant
Maja Celeska Krstevska, Elena Todorova, Mare Srbinovska, Zivko Kokolanski, Vladimir Dimcev, Marija Markovska Dimitrovska, Dimitar Taskovski

MLP-Based Prediction of Slovenian Vehicle CO2 Emissions
Klemen Turšič, Biljana Mileva Boshkoska

13:30–14:30 **Lunch at the venue**

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VŠM FIŠ

DAY 2 FRIDAY, 6 NOVEMBER 2026

14:30–16:00 / ALFA

Decision Support and Security

Chair: Aljaž Blatnik

A framework for converting MCDM methods for model comparison
Anton Stipec, Biljana Mileva Boshkoska

Decision-Making for Society 5.0 – A Multi-Agent Collaborative Process
Andrej Bregar

Optimizing Incident Management in Physical Security: The Role of Artificial Intelligence in PSIM Systems
Dejan Erjavec, Andrej Dobrovoljc

From Organizational Emails to Potentially Critical Business Processes: A Scoping Review and Privacy-Aware Conceptual Framework
Marko Rudolf, Andrej Dobrovoljc

16:00–16:15 **Closing of the conference** Alfa