Conference program

WEDNESDAY 18 NOV		
Start	**End**	
9:00	9:10	Opening ceremony *(chairmen: William Steingartner, Michal Kvet)*
9:10	10:05	Keynote speech – Álvaro Rocha - The Evolution of Digital Health: Measuring Maturity for a Better Future *(chairman: William Steingartner)*
10:05	11:00	Keynote speech - Marie Duží TIL as an Extensional Logic of Procedures *(chairman: Michal Kvet)*
11:00	11:30	Coffee break
11:30	13:10	Session A, B
11:30	13:30	Sessions C and E-POSTER
13:10	15:00	Lunch
15:00	15:40	Sessions A, B
15:40	16:10	Coffee break – for sessions A, B
16:10	17:30	Sessions A, B
15:00	16:00	Session C
16:00	16:30	Coffee break – for session C
16:30	17:30	Session C
15:00	17:30	E-POSTERS
19:00		Welcome party

THURSDAY 19 NOV		
Start	**End**	
9:00	10:40	Sessions A, B
10:40	11:10	Coffee break – for A and B sessions
9:00	11:00	Session C and E-POSTER session
11:00	11:30	Coffee break – for C and E-POSTER sessions
11:30	12:30	Sessions A, B, C
12:30	13:45	Lunch for A, B, C sessions
11:30	12:40	E-POSTERS
12:10	13:45	Lunch for E-POSTER session
14:00		Excursion departure
18:00		Banquet

FRIDAY 20 NOV		
Start	**End**	
9:00	10:40	Sessions A, B
10:40	11:10	Coffee break – for A, B, sessions
11:10	12:10	Sessions A, B
9:00	11:00	Session C
11:00	11:30	Coffee break – for C session
11:30	12:10	Session C
9:00	12:00	E-POSTERS session
12:30	13:00	Closing ceremony
13:00		Lunch

WEDNESDAY 18 NOV		SESSION A Computational Methods and Intelligent Technologies	Chairman: Michal Kvet
Start	**End**	**Paper**	**Authors**
11:30	11:50	In-Domain Gains and Cross-Dataset Limits of Self-Supervised Multi-Scale ECG Classification	Minh Tan Ngo, György Eigner, Levente Kovács, Gyula Péter Szigeti and Mark Bence Szigeti
11:50	12:10	Comparative Performance Study of Domain Constraints, Check Constraints, and Triggers in Oracle Database	Michal Kvet
12:10	12:30	Semiclassical Quantum Counting for Truth-Density Estimation of Noncoherent Systems	Tomas Sobek, Emil Krsak, Michal Mrena and Miroslav Kvassay
12:30	12:50	Logic Gates as Building Blocks of DNA Computing	Michal Bežo, Denisa Macekova and Miroslav Kvassay
12:50	13:10	Adapting Pixel Distillation to a Large Resolution Gap Between the Assistant and the Student Model	Grzegorz Kozłowski
13:30	**15:00**	**LUNCH**	

WEDNESDAY 18 NOV		SESSION A Intelligent Systems, AI-Based Recognition, and Advanced Computational Methods	Chairwoman: Olga Siedlecka-Lamch
Start	**End**	**Paper**	**Authors**
15:00	15:20	Theoretical Computer Science and Quantum Computing: Foundations, Intersections, and Research Directions	Olga Siedlecka-Lamch and William Steingartner
15:20	15:40	SSH Campaign Fingerprints based on Command Taxonomy and Infrastructure Analysis in a University Honeypot	Dominik Hrinkino and Ladislav Huraj
15:40	**16:10**	**COFFEE BREAK**	
16:10	16:30	Integrating Real-Time Gesture Recognition and Formal Grammar Frameworks in a Tactical Game	Lenka Bubeňková, Gabriel Sás, Jaroslav Porubän and Michaela Dedíková
16:30	16:50	Non-Intrusive Driver Drowsiness Detection via Temporal Facial Behaviour Analysis with Weak Supervision	Weiqi Sun, Madhawa Perera, Amany Al Luhaybi and Tom Gedeon
16:50	17:10	Hybrid Neural Network for Automated Detection of Thin and Thick Blood Vessels in Retinal Fundus Images	Michal Lüley, Bryan Williams, Silvester Czanner and Gabriela Czanner
19:00		**WELCOME PARTY**	

WEDNESDAY 18 NOV		SESSION B Generative AI, Large Language Models, and Intelligent Data-Driven Systems	Chairwoman: Jarmila Škrinárová
Start	**End**	**Paper**	**Authors**
11:30	11:50	DataSpinner: LLM-driven Synthetic Dataset Generation Approach For Mobile Robot Applications	Kristián Sopkovič, Dániel Horti, Daniel Hládek and Artúr István Károly
11:50	12:10	Predicting Residual Risk Using Large Language Models and ISO/IEC 27001 Security Controls	Marek Hrabcak and Zoltán Balogh
12:10	12:30	Value co-creation by prosumers in Poland and Germany through adoption of power balancing technologies	Mariusz Przybylik, Paweł Kossecki and Yochanan Shachmurove
12:30	12:50	Competence Personas Shift Caution, Not Discrimination: A Dual-Process Model for Hybrid Markov–LLM User Simulation	Imre Pardi and Anna Bánáti
12:50	13:10	Can a Local Language Model Judge a Query Log? Assent, Not Diagnosis, in ORM Performance Review	Filip Majerík
13:30	**15:00**	**LUNCH**	

WEDNESDAY 18 NOV		SESSION B Advanced Computing, Cybersecurity, and Intelligent Applications	Chairwoman: Sabina Szymoniak
Start	**End**	**Paper**	**Authors**
15:00	15:20	Repeatability and Distinctiveness of Facial Landmark Descriptors for Local IoT Authentication	Sabina Szymoniak and Mariusz Kubanek
15:20	15:40	Performance Evaluation of a Network Steganography Architecture by Code Profiling	Jakub Oravec, Ľuboš Ovseník and Zuzana Liščinská
15:40	**16:10**	**COFFEE BREAK**	
16:10	16:30	Performance Impact of Post-Quantum Cryptography in Web Applications: A Three-Perspective Empirical Study	Martin Pozdílek and Alena Pozdílková
16:30	16:50	A Framework for Evaluating the Robustness of Large Language Models Against Progressive Disinformation Campaigns	Sabina Szymoniak, Aleksandra Pyrkosz-Dziubczyk, William Steingartner and Paweł Gorzałka
16:50	17:10	Interactive 3D Application for Design and Code Generation of Microfluidic Channel Models	Michal Mulík and Marcel Mikolášek
17:10	17:30	Movement of Circulating Tumour Cells in a Capillary Bifurcation of a Microchannel	Michal Mulík, Natália Hajnovičová, Timea Petáková and Thu Thao Tran Minh

WEDNESDAY 18 NOV		SESSION B Advanced Computing, Cybersecurity, and Intelligent Applications	Chairwoman: Sabina Szymoniak
Start	**End**	**Paper**	**Authors**
19:00		**WELCOME PARTY**	

WEDNESDAY 18 NOV		SESSION C Emerging AI Methods in Education, Gaming, and Information Systems	Chairman: Marek Kvet
Start	**End**	**Paper**	**Authors**
11:30	11:50	Variable Neighborhood Search for Adaptive STEM Learning in Multicultural Adult Education	Claudia Cavallaro
11:50	12:10	How Much Data Does Grokking Need? A Five-Thirds Power Law for the Critical Training-Set Size of Transformers on Modular Addition	Rafał Maciejewski and Robert Kłopotek
12:10	12:30	Prompt2Flow: Generating and Iteratively Refining Editable Process Models from Natural Language with a Large Language Model	Timotej Jakubov, Oliver Udvardi and Ján Lang
12:30	12:50	Generative and Simulation-Based Approaches to Modeling Player Archetypes in Persistent Management Games: A Mapping Study	Daniel Weber and Patrik Hrkút
12:50	13:10	From Reinforcement Learning to LLM-Assisted Strategy Labeling: Stability and Scalability of GPU-Accelerated K-Means vs. Spectral Clustering for Turn-Based Strategy Games	Robert Kłopotek, Hubert Zembrowski and Konrad Operacz
13:10	13:30	Scheduling of IoT Tasks and Meeting Deadlines Based on Neural Networks	Adrian Hamada, Jarmila Skrinarova and Michal Mojzis
13:30	**15:00**	**LUNCH**	

WEDNESDAY 18 NOV		SESSION C AI-Driven Cybersecurity, Network Intelligence, and Knowledge-Based Systems	Chairwoman: Dominika Petríková
Start	**End**	**Paper**	**Authors**
15:00	15:20	Combined Information Leakage in an Encrypted Home Assistant ZigBee Network: An Empirical Security Analysis	Ladislav Huraj, Marek Šimon, Dominik Hrinkino and Radoslav Kučínsky
15:20	15:40	Machine Learning and LLM-Assisted Triage for Server-Side Cheat Detection in Massively Multiplayer Online Role-Playing Games	Konrad Operacz, Hubert Zembrowski and Robert Kłopotek
15:40	16:00	Adaptive Thresholding for Autoencoder-Based Network Anomaly Detection under Distribution Shift Across Multiple Datasets	Svitlana Syzranova, Matus Pleva and Eva Kupcova
16:00	**16:30**	**COFFEE BREAK**	
16:30	16:50	Knowledge Graph-Enhanced Retrieval-Augmented Generation for Slovak Legal Question Answering: A Case Study	Matej Ščisl'ak, Daniel Hládek, Kristian Sopkovic, Matúš Pleva, Eva Kupcová and Ming-Hsiang Su
16:50	17:10	Identifying Criteria Weights in Information Systems: A Comparative Framework for Subjective, Objective, and Hybrid Methods	Jakub Rapšík and Michal Kvet
17:10	17:30	Forecasting Polish Sovereign Credit Risk with Uncertainty-Augmented Deep Learning: A Distributed TCN-XGBoost Pipeline on an HPC Cluster	Jan Kanturski and Robert Kłopotek
19:00		**WELCOME PARTY**	

WEDNESDAY 18 NOV		E-POSTER Advanced AI, Machine Learning, and Intelligent Data Processing	Chairwoman: Grigoreta Sofia Cojocar
Start	**End**	**Paper**	**Authors**
11:30	11:40	Impact of Dataset Quality on Transformer-Based Disinformation Detection in Slovak	Hai Tran Ngoc, Eva Kupcova, Matus Pleva and Jan Stas
11:40	11:50	A Controlled Comparative Study of Domain-Adaptive Pre-training and Distillation for Biomedical Sentence Classification	Zhyar Kwekha Rostam and Gábor Kertész
11:50	12:00	Safety Alignment of Large Language Models with Machine-Translated Data: Two Case Studies	Artur Hyrenko, Daniel Hládek, Kristian Sopkovic, Ming-Hsiang Su, Matus Pleva and Artúr István Károly
12:00	12:10	A Bitset-Based Implementation of FDHits for Functional Dependency Discovery	Ivan Pastierik and Michal Kvet
12:10	12:20	Fine-Tuned Encoders and Prompted LLMs for Topic Classification of Czech Municipal Council Agendas	Martin Janeček, Jiří Hynek and Radek Burget
12:20	12:30	A Comparative Analysis of Text Complexity Indicators for the Romanian Language	Dan Cojocar, Grigoreta-Sofia Cojocar, Adriana-Mihaela Guran and Adrian-Ioan Sterca
12:30	12:40	From Heterogeneous Web Sources Towards Semantic Extraction and Knowledge-Base Grounding of National Election Data	Petr Smažinka, Jiří Hynek and Radek Burget
12:40	12:50	ADT-XBM: Adaptive Turnover Control for Cross-Batch Memory in Deep Metric Learning	Attila Farkas and Gábor Kertész
12:50	13:00	From Natural Language to Load Paths: Verifiable Autonomous AI Agents for Engineering Automation	Ricardo Rodrigues, Duarte Fernandes, Cátia Loureiro, Nuno Costa, João Escodeiro, Alexandre Castro, Miguel Pinto, Ali Abbasi, Bruno Sampaio and Manuel Alves
13:00	13:10	Effective solution of differential equations on highly parallel architectures	Petr Veigend, Petr Bém, Gabriela Nečasová, Jiří Jaroš and Václav Šátek
13:10	13:20	Predicting Knee Contact Forces Following ACL Reconstruction Using Markerless Motion Capture and Deep Learning	Tianle Jie, Jiachao Cai and Tibor Goda
13:20	13:30	ADT-XBM: Adaptive Turnover Control for Cross-Batch Memory in Deep Metric Learning	Attila Farkas and Gábor Kertész
13:30	**15:00**	**LUNCH**	

WEDNESDAY 18 NOV		E-POSTER Trustworthy Artificial Intelligence, Cybersecurity, and Digital Transformation	Chairman: Alexandru Iovanovici
Start	**End**	**Paper**	**Authors**
15:00	15:10	From Natural Language to Load Paths: Verifiable Autonomous AI Agents for Engineering Automation	Ricardo Rodrigues, Duarte Fernandes, Cátia Loureiro, Nuno Costa, João Escodeiro, Alexandre Castro, Miguel Pinto, Ali Abbasi, Bruno Sampaio and Manuel Alves
15:10	15:20	Algorithmic Recognition of Strong Regularity in Interval Max-Min Systems	Nikola Tomaščíková and Lukáš Tomaščík
15:20	15:30	Model Artifact Exposure in Brownfield Clinical Deployments: A Lifecycle Analysis of Confidentiality Controls	Bálint Babenyecz, Milán Balázs and György Eigner
15:30	15:40	Cybersecurity Knowledge Gains Following the Use of an Interactive Educational Platform: A Multi-Group Pre–Post Study	Patrik Gajdos, Eva Kupcova and Matus Pleva
15:40	15:50	Trustworthy Cloud-Enabled Digital Twins for Public Buildings: The Roles of Explainability, Trust in Automation, Cloud Security Assurance, and Adoption Intention	Ahsan Waqar, Nasir Shafiq, Babar Nasim Raja Khan, Muhammad Ali Hashmi and Muhammad Imran
15:50	16:00	Evaluating Large Language Models for Malware Detection from Decompiled C/C++ Code	Matej Adamec and Michal Turčaník
16:00	16:10	Benchmarking NoSQL Database Resilience under Transport Layer Flooding Attacks with HAProxy Mitigation	Nicolas Búčik, Ladislav Huraj and Marek Simon
16:10	16:20	From Regulation Text to Assessment Results: An OSCAL-Based Pipeline for Automated IoT Compliance Testing	Ondřej Šulc, Jiří Hynek, Radek Burget and Tomáš Hruška
16:20	16:30	A Source-Based Assessment of MAECO-Lite for Representing Dynamic Malware Analysis Outputs	Roderik Ploszek and Matúš Jókay
16:30	16:40	Learning Styles in E-Learning: An Empirical Analysis of University Students' Preferences	Milan Klement, Lukas Tomaszek, Štěpán Kudláček, Miroslav Juriček, Anna Šišková and Petr Saloun
16:40	16:50	Taxonomy of Upper-Secondary School Students' Attitudes Towards Artificial Intelligence	Štěpán Kudláček, Lukas Tomaszek, Milan Klement, Petr Saloun and William Steingartner
16:50	17:00	Separating Perception from Performance in an AI-Integrated Academic Writing Course	Teodor Sakal Franciškoviċ, Dušan Marković, Vladimir Dimitrieski, Jelena Slivka and Nikola Luburić
17:00	17:10	AI Tools in Film Industry - Analysis of Applications	Pawel Kossecki, Roman Brovko and Dariusz Duzynski
17:10	17:20	VR Environments with Active Tasks for Simulating Heights and Confined Spaces: Design, Technical Readiness and a Pilot Usability Study	Patrik Voštinár and Ján Balázs

WEDNESDAY 18 NOV		E-POSTER Trustworthy Artificial Intelligence, Cybersecurity, and Digital Transformation	Chairman: Alexandru Iovanovici
Start	**End**	**Paper**	**Authors**
17:20	17:30	Mapping Generative AI onto Computational Thinking Practices in Higher Education: A Cross-Domain Narrative Review	Tomáš Dragon, Květoslav Bártek, Matěj Rindoš, Nicolas Palán, Damián Kořalka and Nikola Adámková
19:00		**WELCOME PARTY**	

THURSDAY 19 NOV		SESSION A Innovative Approaches to Data Processing, Retrieval, and Digital Systems	Chairman: Paweł Kossecki
Start	**End**	**Paper**	**Authors**
09:00	09:20	Semantics-Aware Lightweight Log Anomaly Detection	David Hrabcak, Martin Matis, Eva Kupcova and Zuzana Sokolová
09:20	09:40	Evaluating Reciprocal Rank Fusion for Technical-Documentation Retrieval Using a Source-Grounded Synthetic Query Benchmark	Michal Stromko, Peter Bednár, Kristián Sopkovič, Matus Pleva, Valerii Kutsenko and Vladimir Banoci
09:40	10:00	Is Cleaning Production ITSM Incident Text Worth It? A Downstream Evaluation with BM25 and Dense Retrieval	Kristian Sopkovic, Daniel Hládek, Michal Stromko, Matus Pleva, Eva Kupcová and Artúr István Károly
10:00	10:20	Four measurement decisions that determine reported toxicity in large review corpora	Tibor Guzsvinecz and Judit Szűcs
10:20	10:40	Automated Calibration of QuPath Cell Detection for Ki-67 Proliferation Index Assessment	Patrik Ištvanko, Ivan Cimrák and Dominika Petríková
10:40	11:10	**COFFEE BREAK**	
11:10	11:30	Comparative Evaluation of Deep Learning Models for Automated Annotation of Lung Ultrasound Data	Michaela Leľová, Samuel Fodor, Erik Kajati and Ivana Budinska
11:30	11:50	Compaction as a Storage Layout Decision for 3D Medical Imaging in Network-Constrained Hybrid Clouds	Attila Kanto, Miklos Kozlovszky and Attila Csaba Marosi
11:50	12:10	Static analysis of regular expressions in C++	Tibor Teodor Fürész, Kristóf Umann and Zoltán Porkoláb
12:10	12:30	Opportunistic Dispatch of GPU Tasks in a Classroom High-Throughput Computing Pool	Marek Ďurana, Miroslav Kvassay and Anatoliy Sachenko
12:30	**13:45**	**LUNCH**	
14:00		**Excursion departure**	

THURSDAY 19 NOV		SESSION A Innovative Approaches to Data Processing, Retrieval, and Digital Systems	Chairman: Paweł Kossecki
Start	**End**	**Paper**	**Authors**
18:00		**Banquet**	

THURSDAY 19 NOV		SESSION B Advances in Software Engineering, Artificial Intelligence, and Data Science	Chairwoman: Claudia Cavallaro
Start	**End**	**Paper**	**Authors**
09:00	09:20	Parsing Source Code with ASTFRI Libraries	Adam Kitko, Jozef Rechtorík, Michal Mrena and Michal Varga
09:20	09:40	Language-Independent Generation of Pseudocode and UML Class Diagrams via ASTFRI Libraries	Mojmír Bíro, Marek Pastorek, Michal Varga and Michal Mrena
09:40	10:00	A Role-Based AI-Supported Workflow for Brain Tumor Classification Experiments: Towards a Robust Agentic Application	Hiba Adil Al-Kharsan and Róbert Rajkó
10:00	10:20	Gut Microbiome-Based Classification of Chronic Kidney Disease: A Reanalysis with a Perspective on Post-Transplant Monitoring	Martin Blažek, Ema Tuptova and Monika Kováčová
10:20	10:40	Benchmarking Hash Function Implementations for C++ Unordered Map	Juraj Beňo, Michal Mrena, Michal Varga and Linda Blahová
10:40	**11:10**	**COFFEE BREAK**	
11:10	11:30	Cloud Technology Use in Primary Education: Associations with Teachers' Self-Assessed Competence and Institutional Support	Miroslav Juriček, Milan Klement and Petr Šaloun
11:30	11:50	A Multi-Channel Phishing Simulation Platform for Fine-Grained Behavioral Data Collection	Lenka Bubeňková, Gabriel Sás, Jaroslav Porubän and Michal Kollarčik
11:50	12:10	Latent-Space Machine Learning for Full-Curve Prediction of Force--Displacement Responses: A Preliminary Study on CaCO3-Filled Polymer Films	Jakub Hubka, Elżbieta Gawrońska and Tomasz Klepka
12:10	12:30	An extension to the denotational semantics implemented for modeling the evaluation order of expressions in ANSI C	Áron Hárnási and Zoltán Porkoláb
12:30	**13:45**	**LUNCH**	
14:00		**Excursion departure**	
18:00		**Banquet**	

THURSDAY 19 NOV		SESSION C Mathematical Foundations, Intelligent Systems, and Software Engineering	Chairman: Gábor Sági
Start	**End**	**Paper**	**Authors**
09:00	09:20	Synchronized Motion and Force Analysis Reveals Reduced Mediolateral Foot–Shoe Displacement and External Loading with Inversion-Resistant Basketball Shoes	Jiachao Cai, Tianle Jie and Tibor Goda
09:20	09:40	Generative AI Use and Attitudes among Upper-Grade Elementary School Pupils	Davorka Radaković, Tanja Savić and Dora Seleši
09:40	10:00	Procedural Generation of Chain Geometry Using Catmull-Rom Splines	David Pundžák, Peter Poprík, Branislav Madoš, Lukáš Brilla, Sylvia Maťašová and Monika Kohútová
10:00	10:20	Load Balancing in Distributed Reliability Analysis Using Modular Decomposition	Filip Šefčík, Nicolae Brinzei, Michal Mrena, Miroslav Kvassay and Anatoliy Sachenko
10:20	10:40	The Default That Disables Clustering: File-Count Thresholds in Delta Lake Physical Layouts	Tomas Dokoupil and Filip Majerik
10:40	11:00	Beyond a Single QoS: Toward Multi-QoS Autoscaling for Mixed Workloads	Istvan Pintye, József Kovács and Róbert Lovas
11:00	**11:30**	**COFFEE BREAK**	
11:30	11:50	On algebraic semantics for dependence logics	Gábor Sági
11:50	12:10	From Categories of States to Monads and Comonads: A Functorial View of Program State	Monika Kohútová, William Steingartner, Davorka Radaković, Norbert Ferenčík and Katarína Dudová
12:10	12:30	Web app for Hasse diagrams in reliability analysis	Richard Lasso, Peter Sedlacek, Patrik Rusnak and Nicolae Brinzei
12:30	**13:45**	**LUNCH**	
14:00		**Excursion departure**	
18:00		**Banquet**	

THURSDAY 19 NOV		E-POSTER AI-Driven Modelling, Prediction, and Optimization of Complex Systems	Chairman: Robert Kłopotek
Start	**End**	**Paper**	**Authors**
09:00	09:10	Assessing the Workflow for Marker-Based Motion Capture and Its Setup for Educational Purposes	Marek Klimo, Samuel Golian, Miroslav Kvassay and Michal Lekyr
09:10	09:20	A Flexible Binding of Petri Net Scenarios to Virtual Environments	Štefan Korečko, Branislav Sobota, Damian Chmura and Timotej Sobota
09:20	09:30	World-Model Based Innovation Framework for Research-Oriented Small Turbojet Engine Control	Bertalan Beszédes, Stephen Kimathi, Peter Korba, Rudolf Andoga, Ladislav Főző and Dávid Hriadeľ
09:30	09:40	Comparing LSTM–PPO and Transformer–PPO Pipelines for Intelligent Link Switching in Hybrid FSO/RF Systems	Zuzana Liščinská, Ľuboš Ovseník and Jakub Oravec
09:40	09:50	Feasibility-Oriented Simulated Annealing for Electric Bus Charging under Operational Constraints	Andrea Galadíková and Monika Václavková
09:50	10:00	Constraints as Information in Curve Resolution: Geometry, Identifiability, and Physical Interpretability	Róbert Rajkó, Rabeea Razaq and Hiba Adil Al-Kharsan
10:00	10:10	Web-Based Spatial Analysis of Multispectral Data for Precision Agriculture	Olga Siedlecka-Lamch and Piotr Szczerbiak
10:10	10:20	Reconstructing and Investigating the Periodic Table by the Generalized Pair-Correlation Method	Rabeea Razaq, Robert Rajko and Eva Hunyadi-Gulyas
10:20	10:30	AI-Based Prediction of Navigation Lock Operation and Short-Term Hydrological Forecast Correction for a Danube Waterworks	Matej Čiernik, Ladislav Hluchý, Michal Staňo, Jean Rosemond Dora and Lenka Skovajsová
10:30	10:40	Macroscopic Modelling of Traffic Reassignment During Road Closures Using Public Data	Magdaléna Ondrušková, Adam Kaňkovský, Jiří Hynek and Radek Burget
10:40	10:50	Public Transport Delay Prediction Based on Open--Source Data	Juraj Lazúr, Martin Kováčik, Jiří Hynek and Tomáš Hruška
10:50	11:00	Edge ML-Based Architectural Concept for OCPP-Compliant EV Charging Load Management	István Szűcs, Wendler Márk, Gergely Sebestyén, Roland Szand, József Kopják and Zoltán Balogh
11:00	**11:30**	**COFFEE BREAK**	

THURSDAY 19 NOV		E-POSTER Healthcare, Biomedical Engineering, and AI-Driven Systems	Chairman: Adam Dudáš
Start	**End**	**Paper**	**Authors**
11:30	11:40	Interpretable Ki67 Index Classification via Weighted k-Nearest Neighbours on CNN Features	Lucia Piatriková Ondrigová, Dominika Petríková and Ivan Cimrák
11:40	11:50	Experimental and OpenSim Moco Assessment of a Rigid Knee Brace During Forward Landing	Dognxu Wang, Diwei Chen and Goda Tibor
11:50	12:00	A Gaussian Splatting-Based 3D Reconstruction using Computed Tomography Data based on Semantic Segmentation	Oleh Kryvoshei, Patrik Kamencay, Matej Kardos and Miroslav Benco
12:00	12:10	Digital Monitoring and Control of Light Intensity in In Vitro Cell Culture Systems	Katarína Dudová, Norbert Ferenčík, Monika Kohútová, Jana Hlubeňová, Bibiána Ondrejová and Radovan Hudák
12:10	**13:45**	**LUNCH**	
14:00		**Excursion departure**	
18:00		**Banquet**	

FRIDAY 20 NOV		SESSION A Decision Support, Environmental Analysis, and Cyber-Physical Systems	Chairman: Michal Kvet
Start	**End**	**Paper**	**Authors**
09:00	09:20	The impact of computer gaming and gender on student task performance in an educational multi-user virtual environment	Lukas Tomaszek, Miroslava Miklošíková, Martin Malčík, Milan Klement and Petr Saloun
09:20	09:40	Optimization of EMS Network with Respect to Current Ambulance Deployment	Marek Kvet
09:40	10:00	From User Tasks to External Effects: Evidence for Reviewing AI-Agent Actions	Lukáš Šurab
10:00	10:20	Development Methodology of a Civil Protection Preparedness Framework for Cyber-Physical Incidents	Miroslav Betuš
10:20	10:40	Robustness of Environmental Associations in Heterogeneous Traffic Accident Data	Michal Kvet and Alexandra Vojtasová
10:40	**11:10**	**COFFEE BREAK**	
11:10	11:30	Comparison of Digital Spectral Sensors for Power LED Monitoring	Bertalan Beszédes and Rongyu Lin
11:30	11:50	Validation of Satellite-Based Habitat Suitability Models for the White Stork in Lonjsko Polje Nature Park: Integration of Optical and Radar Data	Lada Kovjanić, Javan Meshack, Darko Galinec and William Steingartner
11:50	12:10	GIS-Based Forest Fire Risk Assessment in the Parapannonian Region of Bosnia and Herzegovina Using the Analytic Hierarchy Process	Saša Ljubojević, Pavle Dakić, Lucia Miadoková and Jan Lang
12:30	**13:00**	**CLOSING CEREMONY**	
13:00	**14:00**	**LUNCH**	

FRIDAY 20 NOV		SESSION B Intelligent Systems, Smart Technologies, and Data-Driven Environmental Applications	Chairman: Petr Šaloun
Start	**End**	**Paper**	**Authors**
09:00	09:20	The One-Watched Literal Data Structure for Ordered Clause Counting	Gábor Kusper and Marcell Herbák
09:20	09:40	From Special Education Practice to Software Design: A Web-Based Morning Circle Tool	Tereza Simkova, Petr Saloun, Milan Klement, William Steingartner and Lukas Tomaszek
09:40	10:00	A Sustainable Sensor Solution For Agricultural Use	Martin Pápai, Darya Alontseva, Dana Baishuak, Adema Dairbekova, Alexander Krasavin, Albina Kadyroldina, Assel Kussaiyn-Murat, Kinga Takács and Bertalan Beszédes
10:00	10:20	Design and Validation of a Modular Smart Home System with Ecological Power Supply	Ľubica Žideková
10:20	10:40	Artificial Intelligence for Hydropower Operations: A Data-Informed Review of Forecasting, Federated and Multi-Task Learning	Michal Staňo, Ladislav Hluchý, Lenka Skovajsová, Matej Čiernik, Jean Rosemond Dora and Maximilián Strečanský
10:40	**11:10**	**COFFEE BREAK**	
11:10	11:30	Validity-Aware Evidence for Event-Driven Decisions at the Edge	Gergely Sebestyén, József Kopják, Zoltán Balogh, Roland Szand, István Szűcs and Wendler Márk
11:30	11:50	Can Lightning Location Data Validate Attraction-Space Predictions of Lightning Strike Probability on Structures? A Reproducible Open-Data Analysis and a Detectability Limit	Gábor Szijártó
11:50	12:10	A Modular YOLO-Based Workflow for Regional Camera-Trap Image Processing	Andrea Galadíková, Juraj Besta and Jozef Kostolný
12:30	**13:00**	**CLOSING CEREMONY**	
13:00	**14:00**	**LUNCH**	

FRIDAY 20 NOV		SESSION C Automated Software Analysis, and Adaptive Systems	Chairwoman: Davorka Radaković
Start	**End**	**Paper**	**Authors**
09:00	09:20	Horizon-Dependent Performance of Personalized Blood Glucose Forecasting Models on the OhioT1DM Dataset	Masoumeh Vali and Mátyás Szántó
09:20	09:40	A Local Large Multimodal Model Pipeline for Grading Handwritten Programming Exams	Juraj Paška and Pavol Zajac
09:40	10:00	IDE Support for Domain-Specific Languages Defined by an Object-Oriented Model	Jakub Lukáč and Sergej Chodarev
10:00	10:20	Mining Over One Million Competitive-Programming Source Files: Programming Practices Across Tasks	Marek Horváth and Emília Pietriková
10:20	10:40	From MISRA C Concerns to Rust Safety Obligations: A Case Study of Automatic C-to-Rust Translation	Alexandru Iovanovici, Sebastian Ardelean and Ciprian Chirila
10:40	11:00	Residual Action Adaptation for Domain-Randomized Reinforcement Learning	Péter Farkas, Bence Török, Tamás Bécsi and Szilárd Aradi
11:00	**11:30**	**COFFEE BREAK**	
11:30	11:50	Detection of Formal Issues in LaTeX Theses Using XML Technologies	Michal Tkáč and Matúš Sulír
11:50	12:10	Trust Responsive Runtime Authorization for Agentic AI with Empirical Characterization of Policy Behavior and Parameter Sensitivity	Ahsan Habib Shihab, Stefan Gubo, Ladislav Vegh, Imre Felde and Amir Mosavi
12:30	**13:00**	**CLOSING CEREMONY**	
13:00	**14:00**	**LUNCH**	

FRIDAY 20 NOV		E-POSTER Intelligent Information Processing, Database Optimization, and System Integration	Chairman: Álvaro Rocha
Start	**End**	**Paper**	**Authors**
09:00	09:10	Uncertainty-Aware Detection of Mild Cognitive Impairment from Structural MRI Using a Multichannel 2D CNN	Lenka Husárová, Dmytro Furman, Michal Lüley, Silvester Czanner, Gabriela Czanner and Martina Billichová
09:10	09:20	Visualization of Structural Types in Document Databases	Ondrej Cánik, Adam Dudáš and Adam Kleinedler
09:20	09:30	Data Space Diagnostics and Selection of Fuzzification Mechanisms in UCI Datasets	Tomas Ladovsky, Jan Rabcan and Tetiana Hovorushchenko
09:30	09:40	Optimizing Case-Insensitive Search on VARCHAR Columns in Oracle	Michal Kvet and Andrea Meleková
09:40	09:50	Sensitivity Benchmark of Six Structural Variant Pathogenicity Predictors on Recently Evaluated ClinVar Variants	Katarína Hutirová and Monika Kováčová
09:50	10:00	Automated Data Processing in the Web Page Environment	Alexander Bodnár and Anton Baláž
10:00	10:10	Behavioral Associations of Next-Step Guidance in an AIOps MCP Tool Surface	Michal Stromko, Peter Bednár, Kristián Sopkovič, Matus Pleva and Vladimir Banoci
10:10	10:20	Revisiting ORM Performance Anti-Patterns in LLM-Generated Data Access Code	Filip Majerík
10:20	10:30	Can UML Activity Diagrams Improve Large Language Model Analysis of Software Behavior?	Jakub Abrahoim, Richard Pukáč, Pavle Dakic and Jan Lang
10:30	10:40	Design and Evaluation of an LLM-Based Workflow for Drafting Structurally Valid Conceptual Models	Stefan Novaković, Danijela Banjac and Dražen Brđanin
10:40	10:50	Automated State-Diagram Extraction from React Components for LLM-Augmented Software Development	Peter Hupka, Jakub Abrahoim, Pavle Dakic and Jan Lang
10:50	11:00	From 3NF to Dimensional Models: How Well Do Large Language Models Reconstruct Star, Snowflake, and Constellation Schemas?	Tomas Dokoupil and Monika Borkovcová
11:00	11:10	Benchmark for Crack Re-Identification in Ticket Management Systems	Delcio Ferramenta, Cátia Loureiro, Antonio Silva, Beatriz Miranda, Paulo Brito, André Vieira, Nuno Da Costa, Ricardo Rodrigues and Duarte Fernandes
11:10	11:20	Trace-Based Scheduling Analysis of a Home Assistant E-Paper Display	Michal Ďuračík, Patrik Hrkút, Štefan Toth and Kristína Ďuračíková
11:20	11:30	A Modular ATO Trackside Architecture Based on an Integration Layer	Michal Ďuračík, Ján Ružbarský and Ján Janech
11:30	11:40	Towards Trustworthy Artificial Intelligence in Serbian Healthcare: Current Challenges and a Framework for Clinical Adoption	Nataša Milosavljević, Nebojša Ralević and Marija Paunović

FRIDAY 20 NOV		E-POSTER Intelligent Information Processing, Database Optimization, and System Integration	Chairman: Álvaro Rocha
Start	**End**	**Paper**	**Authors**
11:40	11:50	Effects of Light Stimulation Parameters on Cellular Proliferation: A Review	Katarína Dudová, Norbert Ferenčík, Monika Kohútová, Bibiána Ondrejová, Tomáš Balint and Radovan Hudák
11:50	12:00	Shielded Reinforcement Learning for Real-Time Railway Traffic Management	Péter Farkas, Tamás Bécsi, Balázs Pákai and Szilárd Aradi
12:30	**13:00**	**CLOSING CEREMONY**	
13:00	**14:00**	**LUNCH**	

For notes