16th International Conference

APPLIED INTERNET AND INFORMATION TECHNOLOGIES (AIIT 2026)

CONFERENCE PROGRAMME

ANNEX AMPHITHEATRE	OPENING & PLENARY SPEAKERS	SPEAKERS - AUTHORS
9.00-10.00	Participants registration	
10.00-10.15	Opening	Zoltan Kazi, Milan Nikolić
10.15-11.00	Computational Modelling of Chaotization in Complex Systems	Srđan Popov
	From Risk Data to Financial Decisions: A Framework for Decision Support under Uncertainty	Tanja Vranić
ANNEX AMPHITHEATRE	**REGULAR PAPERS SESSION – ORAL PRESENTATIONS part 1**	**SPEAKERS - AUTHORS**
11.00-12.00	Towards a Computing Performance Profile for Virtual Reality Applications: A Context-Dependent Framework for Runtime Characterization	Danilo Bulatović, Dragan Ivetić
	Ergodic Channel Capacity of MRC Receivers over Independent Non-Identically Distributed Nakagami-m Fading Channels	Suad Suljovic, Dragana Krstic, Dejan Andjelkovic, Mladen Gligorijevic, Marko Medojevic
	Production-State Prediction and Environmental Regulation for Underground Intelligent Poultry Farming Based on Multi-source Visual Perception and Multi-objective Optimization	Yulong Li
12.00-13.00	SNACK AND COFFEE BREAK – TEACHERS LOUNGE	
ANNEX AMPHITHEATRE	**REGULAR PAPERS SESSION – ORAL PRESENTATIONS part 2**	**SPEAKERS - AUTHORS**
13.00-15.00	A Comparative Analysis of Full-Document Prompting and Retrieval-Augmented Generation for FAQ Question Answering	Mihajlo Marjanski, Sofija Mihajlovic, Rade Radisic, Srdjan Popov
	A Zero-Shot Segment Anything Model for Kidney Segmentation in Dynamic Renal Scintigraphy	Vladimir Ivančević, Dunja Vrbaški
	LLM-powered Marketing Multi-Agent System	Luka Glisic, Visnja Ognjenovic, Marko Blazić
	The Sports Information Systems in AP Vojvodina - Best Practices	Dragan Veličković, Nikola Jerković, Vesna Makitan
	Multi-Criteria Evaluation of Cloud, Fog, Edge and Hybrid Architectures for Intelligent Video Analytics in Safe City Networks	Dejan Anđelković, Mladen Gligorijević, Marko Medojević, Danilo Strugarević, Nikola Gligorijević
	Programoteka.rs: Integrating Program Reporting, Evaluation, and Promotion in Public Libraries	Jelena Rodić
	Evaluation of IoT Technologies for Public Transit Tracking: Towards a Modular Hybrid Architecture (Video)	David Talevski, Zoran Kotevski
ONLINE PRESENTATIONS	Architectural Resilience in Frontend Systems: Designing Stable and Autonomous Client-Side Scenarios	Askarov Kazbek, Sychev Yegor, Alooeff Eugene
15.00-17.00	A Hybrid Technique for Detecting Genuine HTML Tables	Mark Alakshin, Viacheslav Paramonov
	Challenges and their solutions in remote IT work	Edin Ajradini, Mimoza Bogdanoska Jovanovska, Dragan Gruevski
	Human Emotion Recognition from Face Expressions and Speech Using Deep Learning Algorithms	Kostandina Veljanovska, Edin Ajradini
	PCA-Driven 3D Scientific Data Visualization Framework in a Desktop-Based Virtual Environment Using WorldViz Vizard	Stefan Stojkov, Andrijana Bocevska
	Intelligent News Aggregation System Integrating Language Model Knowledge and Retrieval-Augmented Generation	Andrej Tosheski, Natasha Blazeska Tabakovska

	The Impact of Artificial Intelligence on Architecture: A Literature Review	Diana Cerkini Mehmeti, Snezana Savoska
	Edition-Aware, Provenance-Tracked Preprocessing of Official Digital-Maturity Time Series for Visual Data Analytics	Teodora Siljanoska Taskovska, Snezana Savoska, Filip Taskovski, Julijana Siljanoska
	Visual Data Analytics in Accounting: Transforming Financial Statements into Decision-Support Information	Filip Taskovski, Blagica Koleva, Teodora Siljanoska Taskovska, Snezana Savoska
	Post-Quantum Migration in Transport Layer Security 1.3: Standards, Performance Evidence and Public Key Infrastructure Dependencies	Sofija Nenadić, Petar Prvulović
	Comparative Evaluation of Claude and Codex for Debugging React and Vue Applications	Nataša Jocković, Nemanja Radosavljević, Petar Prvulović
ROOM 106	**VIDEO PRESENTATIONS**	**AUTHORS**
13.00-14.30	Comparative Evaluation of Embedding Models and Vector Systems for Medical Semantic Retrieval	Katerina Trajchevska, Violeta Manevska
	Evaluation of an Emotinally Adaptive Macedonian Talking Avatar Across Multiple Measures	Mitko Trpkoski, Igor Nedelkovski, Andrijana Bocevska
	An Explainable Framework for Multi-Horizon PM2.5 Forecasting and Extreme Pollution Early Warning	Katerina Trajchevska, Natasha Blazheska-Tabakovska
	Evaluating the Reliability of Large Language Models in Multi-Criteria Decision Support Systems: A Case Study of Frontend Framework Selection	Milena Čančarević, Zoran Nešić
	Experimental Analysis of the Temporal Stability of NVMe SSD Performance under Sustained Sequential Write Workloads	Milena Čančarević, Borislav Đorđević
	Comparative Analysis of Edge Detectors under JPEG2000 Compression in a Virtual TV Studio	Dimitrije Djordjevic, Dragana Radosavjevic, Branimir Jaksic, Nikola Murganic, Dobrivoje Dubljanin
ROOM 106	**POSTER SESSION**	**AUTHORS**
14.30-16.00	From E-Commerce Adoption to Intelligent Commerce: Benchmarking AI Readiness in the European Union and Serbia	Ankica Borota-Tišma, Milan Borota
	Object Detection on Indoor Mobile Video: A Comparison of 2D and Object-Level 3D Methods	Dalibor Šeljmeši, Nikola Santrač
	Comparative Performance Evaluation of AlexNet Inference on Desktop and Embedded Platforms	Darko Pajkovski, Nikola Rendevski, Blagoj Ristevski, Marija Apostoloska-Kondoska
	Evolution of REST API Research: From Architectural Style to Interoperability in Practice	Marjan Trifunjagić
	Data Mining Approach for Analyzing Traffic Safety Indicators	Marija Apostoloska-Kondoska, Blagoj Ristevski, Nikola Rendevski, Darko Pajkovski
	AI Support to Medical Electronic Records Based on Patient Speech Recognition and Document Understanding	Aleksandar Kotevski
	Large Language Models in Decision Support Systems: Roles, Reliability, and Human Oversight	Marko Blažić, Srđan Popov, Višnja Ognjenović, Katarina Vignjevnić
	Conversational Interaction with Data Dashboards Using Large Language Models	Marko Blažić, Srđan Popov
	A Comparative Analysis of Redux and Redux Toolkit in React Applications Based on Code Complexity and Performance	Nikola Jovanov, Eleonora Brtka, Ema Brtka, Vesna Makitan, Aleksandra Stojkov Loncarski
	Logic gates in CMOS H totem-pole topology	Dejan Djukic
	Design and Development of an OpenAlex-Based Knowledge Graph in Neo4j for Scientific Publications and Research Collaboration	Edin Ajradini, Natasha Blazheska-Tabakovska
	Integration of a Source Grounded ASKING Plus Learning Notebook into Graphic Engineering Education	Nemanja Kašiković, Dragana Glušac, Velibor Premčevski, Aleksandar S. Anđelković, Nemanja Tasić
	Automated Generation of PHP Web Components from a Physical Data Model	Branislava Radu
	Application of Large Language Models in Automated Software Test Cases Generation	Branislava Radu, Ljubica Kazi and Ivana Berković

	LLM-Based Agents for Automated Software Quality Assurance: Test Generation, Code Review, and Static Analysis	Aleksa Stojić, Aleksandar Kupusinac
	Current Trends and Challenges of Artificial Intelligence in 3D Modeling and Animation	Tibor Szakáll, Anita Sabo, Bojan Kuljić
	Comparative Analysis of Blender Rendering Engines and Cycles Quality Settings in Computer Graphics	Tibor Szakáll, Anita Sabo, Bojan Kuljić
	A Conceptual Architecture for Project Scope Management in IT Projects: An Agile-HRM Perspective on Requirements and Change Control	Dejan Igov, Dragan Bojanić, Sanja Stanisavljev, Zlatko Košut, Ivana Denčić
	Person-Centric Spitting-Event Detection Under Data Scarcity: A Feasibility Study on Synthetic Surveillance Video	Rushabh Shah, Harsh Tanna, Aayush Gala, Jia Rathod, Pallavi Mangrulkar, Poorva Agrawal
	Security-by-Design of the Image Upload Path in an IoT-Based Plant Disease Detection System	Bojan Đurđić, Sanja Maravić Čisar, Robert Pinter, Petar Čisar
	Assessment of Online Catalog Search in Serbian Public Libraries and Approaches to Recording Lost Demand Data	Jelena Rodić, Igor Petković, Anita Palfi
	Student Interaction with Intelligent Educational Agents in Formal Education: Usage Patterns, Benefits, and Risks	Katarina Vignjević, Ivana Berković, Ana Milin
	Prototype and Preliminary Experimental Evaluation of Hybrid Classical and Post-Quantum Key Establishment for Secure Data Exchange	Tamara Milic, Igor Vecstejn, Biljana Radulovic, Vuk Amizic
	Learning Rate Effects on Deep Q Neural Network Performance in Lunar Lander and Pac-Man Computer Games	Darko Mirchevski, Blagoj Ristevski, Nikola Rendevski
	Cryptographic Wrapper for the ESP32 – AES-GCM, RSA and Post-Quantum ML-KEM-768	Vuk Amizic, Dalibor Dobrilovic, Igor Vecstejn
	Development of an Algorithm for Adaptive Educational Support Based on Learning Analytics for Integration into the Intelligent E-Learning System Eduai	Hristina Dimova Popovska, Tome Dimovski, Filip Popovski, Gorica Popovska Nalevska
	A Five-Layer IT Framework for Supporting the Circular Economy Through Industry 4.0 Technologies	Bozidar Milenkovski, Saso Nikolovski, Viktorija Spasevska, Biljana Stojcevska
	Impact of Fine-Tuning on React Code Generation	Nikola Jovanov, Vladimir Brtka, Eleonora Brtka, Albina Kószó, Gordana Jotanovic, Goran Jausevac
	Noise-Level-Based Adaptive Parameter Selection for Aggregation-Based Fuzzy Denoising of Monte Carlo Rendered Images	Julijana Kilibarda. Nebojsa Ralevic
	Process Before AI: Strategic AI Deferral in Small Enterprises	Ivana Denčić, Sanja Stanisavljev, Dejan Kovačević, Mila Kavalić, Verica Gluvakov
	From Clicks to Enrollment? A Measurement Framework for Digital Higher-Education Recruitment Effectiveness	Timea Sakal Hornjak
	Course Question Answering System Based on Large Language Models and Retrieval-Augmented Generation: Case Study with Object-Oriented Programming Teaching	Aleksa Stojić, Aleksandar Kupusinac
	Agentic Development Workflows in Software Engineering	Aleksa Stojić, Aleksandar Kupusinac
	Automated Image-Based Shape Analysis of Ray Florets and Achenes in Wild Annual *Helianthus* Species Using Elliptic Fourier Descriptors and PCA in Python	Marijana Matkovski, Olivera Lazić, Aleksandar Kupusinac, Dunja Vrbaški, Milan Jocković, Sandra Cvejić, Jelena Jocković
	From Human Sensors to a Phishing Leakage Indicator: Linking User Reports with Email Gateway Telemetry	Toni Nakovski, Natasha Blazheska-Tabakovska
	Digital Transformation Strategies for Business Process Optimization	Peko Lakatuš, Mihalj Bakator, Uroš Šarenac, Marija Manojlović
	Business Strategies for AI Driven Decision Making in Modern Organizations	Peko Lakatuš, Mihalj Bakator
	Educational Model for Teaching Semantic Web Based on Ontologies Integration	Branislava Radu, Zoltan Kazi, Ljubica Kazi
	The Role of Object-Oriented Programming in the Era of AI-Driven Vibe Coding	Nikola Jovanović, Miloš Ilić, Dejan Viduka
	Navigating the Project Management Tools Landscape: Insights into Features, Strengths, and Limitations	Miloš Ilić, Vladimir Mikić, Goran Keković, Aleksandar Stokić
	Analysis of the Use of UML Diagrams in the Design of Microservice Architectures	Tamara Milić, Zoltan Kazi
	Experimental Evaluation of Hybrid Lexical-Semantic Retrieval and Document-Level Aggregation for Unstructured Document Search	Nikola Mandić, Predrag Pecev, Branko Markoski

	Design and Experimental Evaluation of a ROS 2 Driver for Hoverboard-Based Differential-Drive Robots	Predrag Pecev, Nikola Mandić, Branko Markoski, Velibor Premčevski
	Information Security Risk Assessment of an RFID-Based Educational Information System	Anita Sabo, Tibor Szakáll, Bojan Kuljić
	Environmental Burdens of U.S. Data Centers' Growth in the AI Era: Electricity, Water, and Greenhouse-Gas Scenarios to 2033	Ilija Hristoski, Jelena Stojanov, Željko Stojanov
	Evaluating Students' Perceptions of ALEKS as an AI-Supported Adaptive Learning System in Programming Education	Jelena Ilić
	Assessment of Large Language Models–Based Artificial Intelligence Tools Potentials for Agrochemical Soil Analysis Utilization: Case Study with Fertilization Recommendations for Crops and Vegetable Fields	Željko Eremić, Milana Drašković
	Output-Aware Hardware–Software Partitioning for Browser Video Processing	Milena Čančarević, Borislav Đorđević