

**International Scientific Conference**  
**”ALFATECH – Smart Cities and modern technologies”**  
**06.03.2026.**  
**Alfa BK University, Bulevar marsala Tolbuhina 8, Belgrade**

**CONFERENCE PROGRAM**

Time	Activity	Moderator	Location
9:30 - 11:00	Registration of participants		University Hall
11:00 - 11:30	Opening Ceremony	prof. dr Milan Gligorijević prof. dr Mihailo Jovanović	A 1
11:30 - 13:00	<b>First Session</b>	prof. dr Milan Gligorijević	A 1
	1. Beograd siguran grad – interisani bezbednosni sistem grada Beograda – <b>Darko Glavaš - Sekretar za poslove odbrane, vanredne situacije i koordinaciju grada Beograda</b>		
	2. Pametna tehnologija upravljanja u sistemu Inteligentnih gradova – <b>Informatika</b>		
	3. Analiza skalabilnosti federativnog učenja u mrežama autonomnih vozila – <b>prof. dr Vladimir Mladenović</b>		
	4. Adatel OS Platforma - <b>Adatel</b>		
	5. Pametni gradovi i tehnologije - <b>Hytera</b>		
	6. AI Bazirana detekcija registarskih tablica kao komponenta infrastrukture bezbednog grada – <b>dr Nikola Gligorijević</b>		
	7. Uloga mobilnog operatera u smart city projektima – <b>AI</b>		
	8. A Generative AI Suite that makes everything usable – <b>Mitsumono AI by basicmath Inc Japan</b>		
9. Od povezanih uređaja do povezanosti uma: Ka arhitekturi hiperpovezanih sistema inteligencije – <b>doc. dr Stefan Popović</b>			
13:00 - 14:00	Coffee Break & Koktel		University Hall
14:00 - 16:00	<b>Parallel sessions</b>	doc. dr Dragana Dudić doc dr Aleksandra Gajović msr Sonja Đukić Popović	A 2 A 4 A 1
	<b>Science in the Era of Artificial Intelligence Innovations in Smart Cities – Problem Solving Trends and Innovations in Education</b>		
14:00 - 15:00	<b>Round table</b> - Technology as a Driver of Sustainable Development and Environmental Protection in the Economy.	prof. dr Violeta Dimić prof. emeritus Jozefina Beke Trivunac	S 2



		doc. dr Zorica Đurić	
14:00 - 15:00	<b>Round table</b> - Strategic Development of Education in the Era of 5G/6G Networks and Smart Cities	mrsr Sonja Đukić Popović prof. Milan Stošić	A 1
15:00 - 16:00	<b>Round table</b> - Strategic Development of Economy and Local Governance in the Era of 5G/6G Networks and Smart Cities	doc. dr Aleksandra Gajović	A 2
16:00 - 16:30	Coffee Break		University Hall
14:00 – 18:00	<b>Poster Session</b>	doc. dr Milan Brkljač	University Hall & S 1

### Conference Agenda

<p><b>Innovations in Smart Cities        &amp;        Trends and Innovations in Education</b></p>
<p><b>A 1 - Moderator</b>        doc. dr Aleksandra Gajović        mrsr Sonja Đukić Popović</p>
<p><b>Density-Based Clustering of Textual and Numerical Data Using DBSCAN: Insights from Heterogeneous Datasets</b>        Vojkan NIKOLIĆ, Sanja RAIČEVIĆ, Miraš MILAŠINOVIĆ ***</p>
<p><b>Mathematical Optimization of Combined Heat and Power Plant Operation Using the Elbow Method to Maximize Market Potential in The Day-Ahead Market</b>        Etjan KIRALJ, Filip KOKALJ</p>
<p><b>The Prototype of the Information Security System of Educational Institutions</b>        Olga SHVETS, Danila KONDRATOV ***</p>
<p><b>Implementation of Virtual Reality in Training Systems for High-Risk Occupations: Analysis of Cognitive and Operational Benefits</b>        Predrag VELIČKOVIĆ, Miljana LUKOVIĆ</p>
<p><b>Face Biometrics as a Trust Enabler in the Smart Cities Concept</b>        Nikola VOJTEK, Vladan PANTOVIĆ</p>
<p><b>Application of Information Technologies in Smart Cities: Transport, E-Waste and Environmental Protection</b>        Saša MILOJEVIĆ, Milan BUKVIĆ, Momčilo ĐORĐEVIĆ, Milena PETROVIĆ, Dejan GOJIĆ ***</p>
<p><b>Round table - Strategic Development of Education in the Era of 5G/6G Networks and Smart Cities</b></p>
<p><b>Application of Modern ICT Solutions in Strengthening the Public Safety of Smart Cities</b>        Slaviša ĐUKANOVIĆ</p>
<p><b>Information Technology Security as The Foundational Framework for Smart Cities</b>        Vladimir ĐOKIĆ, Dragana ĐOKIĆ, Olja KRČADINAC</p>
<p><b>Cybersecurity of Critical Infrastructure in Smart City</b>        Duško LAKOVIĆ</p>
<p><b>Round table - Strategic Development of Economy and Local Governance in the Era of 5G/6G</b></p>

<b>Networks and Smart Cities</b>
<b>Role of Data Integration Tools in Smart Sewer Scenario and Hybrid Cloud Environment</b> Slavimir VESIĆ, Duško LAKOVIĆ ***
<b>Implementing GitOps with ArgoCD and Kubernetes for Continuous Deployment of Smart City Microservices: A Case Study in Traffic Management Systems</b> Sava STANISIC, Ivan TOT, Borislav DJORDJEVIC, Olga RISTIC, Branislav BELOTIC, Milan VESKOVIC
<b>Intelligent Real-Time Adaptive Learning: A Performance Analysis of Educational Systems</b> Momčilo RANĐELOVIĆ, Radoje JEVTIĆ, Jovan NIČKOVIĆ, Dragan VUČKOVIĆ
<b>Digital Literacy or Digital Maturity? Redefining Educational Standards in the Era of Smart Cities</b> Dijana MANČE, Lola MILOVANOVIĆ ***
<b>Artificial Intelligence in Digital Systems for Documenting and Safeguarding Intangible Cultural Heritage</b> Iva LJESAR, Vuk VUJOVIĆ ***
<b>Science in the Era of Artificial Intelligence</b>
A 4 - Moderator Goran Kekovic Dragana Dudić
<b>Reframing Air Pollution Prediction: The Regression-Classification Dichotomy in Artificial Neural Networks</b> Goran KEKOVIĆ, Vladimir MIKIĆ, Miloš ILIĆ, Rade BOŽOVIĆ
<b>Human Factors and Human Behavior: A Comparative Analysis of Aviation and Modern Transportation systems</b> Ilche Kanevchev
<b>AI in Learning C Programming: Ally or Trap?</b> Luccas SVICERO LINS DE CARVALHO, Rogério APARECIDO CAMPANARI XAVIER, Angela TERESA ROCHETTI, Anderson DUARTE BETIOL, Luciana SARTORI MURARI, Paulo CÊSAR MIORALLI, Elson AVALLONE ***
<b>Integration of Cloud Computing and IoT Systems in the Development of Smart Educational Environments</b> Marko MARKOVIĆ, Ana VELJIĆ, Srđan MARIČIĆ
<b>Blockchain-Enabled Smart Digital Marketing: A Conceptual Evaluation Framework for Enhancing User Experience</b> Lidija PAUNOVIĆ, Sandra MILUNOVIĆ KOPRIVICA
<b>Impact of Meteorological Predictor Selection on Drought Forecasting Accuracy</b> Ninoslava TIHI, Srđan POPOV, Miloš TODOROV, Sanja STANKOV, Filip KOKALJ
<b>The City as an Educational Tool: Cultural Infrastructure as the Wise Pillar of Smart Cities</b> Mila NIKOLIĆ - online
<b>Prime Factorisation for Fast Signal Processing</b> Dejan DJUKIC
<b>Graph-Theoretic Models for Route Optimization in Smart Cities with Applications to Waste Disposal Systems</b> Duško BOGDANIĆ, Dragoslav VIDOVIĆ ***
<b>Low-Cost IoT Water Quality Monitoring Station with Local Data Logging for Smart Environments</b> Mitar Miki TEPIĆ
<b>Innovations in Smart Cities – Problem Solving</b>
A 2 - Moderator Zorica Đurić

<p><b>Artificial Intelligence as the Basis for Smart City Management: Automating the Identification of Regulatory Conflicts</b> Anastasia ZUBKOVA, Leonid BOBROV</p>
<p><b>Smart Urban Systems and Economic Development: A Multidimensional Perspective</b> Marijana JOKSIMOVIĆ, Marijana JOVANOVIĆ TODOROVIĆ, Zorica ĐURIĆ</p>
<p><b>Round table - Technology as a Driver of Sustainable Development and Environmental Protection in the Economy.</b></p>
<p><b>The Role of Electronic Commerce in Sustainable Smart City Development</b> Biljana VIDUKA, Suzana BALABAN, Julia KARCZ-RYNDAK</p>
<p><b>Digitalization of Payments in Smart Cities: Artificial Intelligence as a Factor of Economic Growth and Development</b> Sanel MEHMEDI, Marijana JOKSIMOVIĆ, Boris Siljaković</p>

## Poster Session

**Application of Data Mining Methods for Automated Access Detection in Smart Tourism Systems**  
Vladimir KRAGULJAC, Luka ALEBIĆ, Dejan VIDUKA

**New Technologies in the Function of Smart Cities**  
Kostadinka STOJANOVIĆ, Nebojša DENIĆ, Jelena STOJANOVIĆ, Stefan MILIĆ, Sanel MEHMEDI

**The Impact of the Digitalization of Urban Environments on Educational Inequalities**  
Veselinka LEJIĆ, Milica VARŠANDAN, Čaba VARŠANDAN, Ivana VASIĆ

**Historical Development of Fourier Transform and Its Contemporary Application in Network Performance and System Security Analysis**  
Nikola PETROVIĆ, Vojkan NIKOLIĆ, Milan GLIGORIJEVIĆ

**Smart City or Digital Cage: Safety vs. Privacy in AI and IoT Monitoring**  
Milica VARŠANDAN, Čaba VARŠANDAN, Arpad BALIND, Veselinka LEJIĆ

**The Impact of Digital Transformations on Improving the Quality of a New – Innovative Product**  
Ana-Marija VUKIĆ, Marko KIHLEK, Dragana SAJFERT

**A Fuzzy Multi-Criteria Framework for Cyber Threat Prioritization in Smart City IoT Systems: Sensitivity and Robustness Analysis**  
Mimica MILOŠEVIĆ, Dušan MILOŠEVIĆ

**Digital Shield of the City: Application of Artificial Intelligence in Predicting Infrastructure Collapse and Climate Hazards**  
Čaba Varšandan, Milica Varšandan, Veselinka Lejić, Arpad Balind

**Asynchronous Counters Based on D Flip-Flops in IoT Systems for Smart City Applications: Operation and Delay Effects**  
Dušan PETROVIĆ, Violeta DIMIĆ

**Possible implications of IoT implementation on society**  
Nebojša DENIĆ, Jelena STOJANOVIĆ, Kostadinka STOJANOVIĆ, Saša MIHAJLOVIĆ, Stefan MILIĆ

**Predictive Maintenance as a Strategic Pillar of Smart City Infrastructure**  
Igor LAVRNIĆ, Bojana ŽIVKOVIĆ, Borivoj NOVAKOVIĆ

**Evaluating Temporal Horizons in Air Pollution Prediction Using Gradient-Boosted Trees**  
Igor DOBOVIČEK, Dragana DUDIĆ

**Identifying a Minimal Feature Set for Accurate PM2.5 Prediction in Urban Sensor Network**

Filip PETRIČKOVIĆ, Ana ĐOKIĆ, Dragana DUDIĆ

**Elements of System Management in Smart Buildings**

Snežana ĐORIĆ-VELJKOVIĆ, Milan GOCIĆ

**Artificial Intelligence in Education: Using ChatGPT to Generate Math Problems**

Sanja RUDIĆ, Miroslava MIHAJLOV CAREVIĆ, Miloš TODOROV, Sanja STANKOV

**Integration of Modern Information Technologies Into the Teaching Process as a Factor of Economic Efficiency of the Education System**

Jovana LISINAC, Đina TIMOTIJEVIĆ

**PPG Signal Analysis - Neural Network Model Testing for Different Wavelets**

Zlatko RADOVANOVIĆ, Mirjana TOMIĆ

**Paradigms of Evolution and Challenges of Applying Industry 4.0**

Jelena STOJANOVIĆ, Nebojša DENIĆ, Kostadinka STOJANOVIĆ, Stefan MILIĆ, Saša MIHAJLOVIĆ

**Literature Review on Scalability in Microservice Architectures**

Tamara MILIĆ, Zeljko STOJANOV, Miodrag KOVACEVIC, Igor VECSTEJN

**STEM in Preschool Preparatory Groups - A Case Study**

Sabina MEKIĆ, Vanja BAŽDAR, Marija MATOVIĆ, Gokmen bi KATIPOGLU, Ana MATOVIĆ

**Resilience Assessment of Smart Sports Systems in Smart Cities**

Janičije KARIĆ, Ana BAŠIĆ, Vanja DIMITRIJEVIĆ

**Hybrid Communication System in Smart Cities**

Vladimir LEKIĆ

**Healthcare Protection within the Concept of Contemporary Urban Development**

Drasko DUBLJANIN, Andrijana BARAC, Aleksandar JEREMIC, Danilo TIMOTIJEVIC, Jaksa DUBLJANIN

**Registers in Modern Digital Systems and Smart Cities**

Siniša ANDREJEVIĆ

**Python-Based Traffic Signal Timing Optimization for Smart Intersections Using Discrete-Event Simulation**

Dejan ANĐELKOVIĆ, Marko MEDOJEVIĆ, Mladen GLIGORIJEVIĆ, Miraš MILAŠINOVIĆ

**Security In VoIP Networks**

Ana MATOVIĆ, Vanja BAŽDAR, Edis MEKIĆ, Marija MATOVIĆ, Elmedin BIBEROVIĆ

**Database Performance Optimization for Smart City IoT Platforms**

Miloš ILIĆ