

YU INFO

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Informaciono društvo Srbije

31. NACIONALNA KONFERENCIJA

u oblasti  
informaciono-komunikacionih tehnologija

**YU INFO 2025**

**PROGRAM  
KONFERENCIJE**

9 - 12. mart 2025. godine

Kongresni centar  
hotela „GRAND“

Kopaonik, SRBIJA



# **PROGRAM KONFERENCIJE**

9 - 12. mart 2025. godine

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# YU INFO - 31 godinu sa Vama

U martu, sada već davne 1995. godine, u ski centru Brezovica na Šar planini, održana je prva nacionalna konferencija iz oblasti informaciono-komunikacionih tehnologija „YU INFO“. Grupa entuzijasta, predvođena profesorom Mišom Ivkovićem, počela je jednu novu epohu razvoja IKT oblasti u Srbiji i ispostaviće se u narednim godinama da će ova konferencija postati najmasovniji skup stručnjaka u ovoj oblasti u našoj zemlji, koji su doprineli razvoju celokupne naše naučne i stručne zajednice. Nakon prva tri izdanja konferencije koja su se održala na Šar planini, konferencija se preselila na Kopaonik, u martu 1998. godine, gde se i danas održava.

Prve tri decenije ove konferencije ispratilo je više od 10 hiljada učesnika, a na dosadašnjim konferencijama je saopšteno i u zbornicima radova objavljeno više od četiri hiljade radova. Značajan doprinos razvoju konferencije dali su naši prijatelji, partnerske kompanije, kojih je bilo više od 200 i koje su svojim donacijama i sponzorstvima pomogle da ova konferencija opstane i u najtežim kriznim danima.



Zbog sve većeg broja radova koji su pristizali od inostranih autora, od 2011. godine, organizuje se u isto vreme, kao „ćerka“ konferencije, internacionalna konferencija ICIST (*International Conference on Information Society and Technology*), na engleskom jeziku. Odabrani najbolji radovi sa ove konferencije u više navrata su publikovani kao posebna izdanja značajnih visokorangiranih međunarodnih časopisa koji se nalaze na listi naučnih časopisa sa impakt faktorom. Od 2023. godine, zbornik radova se izdaje i kao izdanje *Springer's Lecture Notes book*.

Svim učesnicama prethodnih izdanja konferencija se zahvaljujemo na podršci i učešćima, i pozivamo ih da proslavimo zajedno 31. izdanje ove konferencije i jubilarno 15. izdanje konferencije ICIST. Nauka, skijanje i druženje pod suncem Kopaonika => YU INFO konferencija.

# Satnica po sesijama

Datum	Dan 1. 9.3.2025. nedelja	Dan 2. 10.3.2025. ponedeljak			Dan 3. 11.3.2025. utorak			Dan 4. 12.3.2025. sreda	
Satnica	Sala „Pančić 1 i 2“	Sala „Pančić 1“	Sala „Pančić 2“	Sala „Sunčani vrhovi“	Sala „Sunčani vrhovi“	Sala „Pančić 1“	Sala „Pančić 2“	Sala „Pančić 1“	Sala „Pančić 2“
9:00		YU #1: Digitalizacija i e-zdravstvo						YU #6: Vojne simulacije i primene	
9:30									
10:00									
10:30									
11:00									
11:30									
12:00									
12:30									
13:00									
13:30			ICIST - Special track: Autonomous driving						
14:00									
14:30									
15:00									
15:30	Registracija (lobi ispred Pančić 1 i 2)	ICIST - Special track: Digital water	ICIST - Generative AI and Large Language Models - Session 1	YU #2: Veštačka inteligencija		ICIST - Software engineering	ICIST - Special track: ICT for health, well-being and sport, Session 1		
16:00					YU #4: Softverski sistemi i savremene informacione tehnologije				
16:30									

**\*nastavak satnice na narednoj stranici\***

Datum	Dan 1. 9.3.2025. nedelja	Dan 2. 10.3.2025. ponedeljak			Dan 3. 11.3.2025. utorak			Dan 4. 12.3.2025. sreda		
Satnica	Sala „Pančić 1 i 2“	Sala „Pančić 1“	Sala „Pančić 2“	Sala „Sunčani vrhovi“	Sala „Sunčani vrhovi“	Sala „Pančić 1“	Sala „Pančić 2“	Sala „Pančić 1“	Sala „Pančić 2“	
17:00	Otvaranje konferencije (pozdravne reči organizatora)	Panel: Šta menadžment očekuje, a šta ima od primene veštačke inteligencije?	ICIST-Poster session (lobi ispred Pančić 1 i 2)		YU #4	Glavno predavanje	ICIST - Generative AI and Large Language Models, Session 2			
17:30										
18:00		AI i regulativa		YU #3: Mašinsko učenje i veliki jezički modeli	YU #5: Informacioni sistemi, računarske simulacije i edukacija	ICIST - AI & IoT for Smart Industry, Session 2	Special track: ICT for health, well-being and sport, Session 2			
18:30		IBM Guardium (SBS lecture)	ICIST - AI & IoT for Smart Industry, Session 1							
19:00										
19:30										
20:00	Veče dobrodošlice									
20:45										
21:00		WINE SESSION (sala Pančić 2)	Konferencijska žurka - „Rok veče“ (Medicine bend @Pub & Ko Konaci)			<p>Sponzor večeri dobrodošlice:</p>    Serbian Business Systems				
21:30	VINARIJA „Cvetković“ Aleksandro vac	<p>Sponzor žurke:</p> 								

# Nedelja, 9. mart 2025.

## 15<sup>30</sup> Registracija učenika

lobi ispred sala  
„Pančić 1“ i  
„Pančić 2“

## 17<sup>00</sup> Otvaranje konferencije

sala „Pančić 1“

- Pozdravne reči organizatora konferencija YU INFO i ICIST 2025
- Glavna predavanja (*Keynotes*):
  - Pawel Herman (Division of Computational Science and Technology, School of Electrical Engineering and Computer Science, KTH and Digital Futures)

Tema: Neuromorphic computing

- Miroslav Trajković (Zebra Technologies Corporation, USA)

Tema: Computer vision

## 20<sup>00</sup>

## Veče dobrodošlice

### „Wine Session & Wine Tasting“ (vinarija „Cvetković“)

sala „Pančić 2“



Sponzor večeri dobrodošlice i  
vinske sesije  
kompanija SBS



Serbian Business Systems

# Ponedjeljak, 10. mart 2025.

<b>Sesija YU #1: Digitalizacija i e-zdravstvo</b>	
<b>09:00-11:00, sala „Pančić 1“</b>	
<b>Moderator:</b>	<b>Dr Anđelka Zečević (Matematički institut SANU)</b>

R.br.	Naslov rada	Autori
1.01.	Evaluacija statističkih metoda imputacije gena u podacima prostorne transkriptomike	<b>Smiljković, Lazar;</b> Mišić, Marko; Kovačević, Vladimir
1.02.	Radiološki pejzaži: prepoznavanje i analiza prostornih odnosa u radiološkim izveštajima	Popović, Isidora; <b>Zečević, Anđelka</b>
1.03.	Novi sistem identifikacije u porodilistima zasnovan na otisku prsta bebe	<b>Lalović, Komlen</b>
1.04.	Metrički rezultati otiska prsta predstavljeni kroz Java GUI aplikaciju	<b>Lalović, Komlen</b>
1.05.	Uticaj uvođenja ERP sistema na unutrašnju organizaciju finansijske funkcije u kompaniji	Jovanović, Milan; <b>Todorović, Ivan;</b> Jaško, Ondrej; Stanimirović, Petar; Marič, Miha
1.06.	ChagGPT kao podrška inteligentnim rudnicima	Majstorović, Vidosav; <b>Stošić, Dragan;</b> Simeunović, Vladimir; Negočić, Rastko; Todorović, Filip
1.07.	Projekat KNX instalacije na primjeru višestambenog objekta	Đukić, Predrag; Zorica, Siniša; <b>Antunović Terzić, Sandra;</b> Pejak, Petra; Cvjetković, Slobodanka Jelena
1.08.	Unapređenje procesa obračuna utrošene električne energije u EPS AD Beograd	<b>Ristić, Jadranka</b>



# Ponedjeljak, 10. mart 2025.

<b>Sesija YU #2: Veštačka inteligencija</b>	
<b>15:00-17:00, sala „Sunčani vrhovi“</b>	
<b>Moderator:</b>	<b>Prof. dr Boris Delibašić (Univerzitet u Beogradu, Fakultet organizacionih nauka)</b>

R.br.	Naslov rada	Autori
2.01.	Neuromorfno računarstvo i tečne mašine stanja u sistemima za otkrivanje upada nad CIC-IDS2017 skupom podataka	<b>Živadinović, Miloš;</b> Simić, Dejan
2.02.	Digitalna transformacija u šumarstvu – primena TinyML tehnologije i veštačke inteligencije na ivici	<b><u>Pavlović, Dejan</u></b>
2.03.	Sistemi za podršku odlučivanju u eri veštačke inteligencije	<b>Delibašić, Boris;</b> Suknović, Milija
2.04.	Primjena mašinskog učenja za opisivanje slika pomoću teksta	<b>Mičić, Aleksije;</b> Đurić, Zoran
2.05.	Predviđanje uspešnosti memorizacije slike pomoću modela mašinskog učenja	<b>Matvejev, Valerijan;</b> Dražković, Dražen
2.06.	Evolucija veštačke inteligencije, izazovi i novi trendovi u zdravstvu	<b>Terzić, Rajko;</b> Majstorović, Milosav; Pantović, Vladan; Terzić, Dušan
2.07.	Energetska efikasnost pristupne mobilne mreže Telekom Srbija a.d.	<b>Aleksić, Danijela</b>

# Ponedjeljak, 10. mart 2025.

<b>Sesija YU #3:</b>	
<b>Mašinsko učenje i veliki jezički modeli</b>	
<b>18:00-20:00, sala „Sunčani vrhovi“</b>	
<b>Moderator:</b>	<b>Prof. dr Dražen Drašković</b> <b>(Univerzitet u Beogradu,</b> <b>Elektrotehnički fakultet)</b>

R.br.	Naslov rada	Autori
3.01.	Snimanje bilingvalne baze AI-SPEAK za multimodalno prepoznavanje govora	<b><u>Nosek, Tijana;</u></b> Suzić, Siniša; Stanojev, Vuk; Jakovljević, Nikša; Krstanović, Lidija; Sečujski, Milan
3.02.	Analiza indeksa ljudskog razvoja i njegovih komponenti korišćenjem metoda mašinskog učenja	<b><u>Radojičić, Dragana;</u></b> Stamenković, Mladen
3.03.	Integracija velikih jezičkih modela u obrazovanju: Percepcije studenata kroz praktične primene	<b><u>Ivankovic, Zdravko;</u></b> Pecev, Predrag; Sudar, Sasa; Damjanovic, Jasmina; Ivankovic, Milana
3.04.	Uticaj augmentacija trening podataka na performanse doobučenog Whisper modela	<b><u>Suzić, Siniša;</u></b> Nosek, Tijana; Simić, Nikola; Pekar, Darko; Delić, Vlado
3.05.	Prikupljanje podataka i označavanje u procesu formiranja skupova podataka govora mržnje na srpskom jeziku	<b><u>Drašković, Dražen;</u></b> Radenković, Uroš; Mićović, Marko; Cincović, Jelica; Milaković, Adrian; Jocović, Vladimir;
3.06.	Automatska transkripcija i dijarizacija govora korišćenjem Whisper AI (studentski istraživački rad)	Isailović, Jovan; Lazović, Luka; Mandić, Ana; Jelović, Marko; mentor: Drašković Dražen
3.07.	Automatska provera tačnosti izjava pomoću velikih jezičkih modela (studentski istraživački rad)	Nikolić, Filip; Bulatović, Ana; Mihajlov, Anja; Popović, Lana; mentor: Drašković Dražen
3.08.	Automatizovani sistem za proveru konzistentnosti govora javnih ličnosti vođen veštačkom inteligencijom (studentski istraživački rad)	Mijatović, Hana; Vučićević, Nikola; Bogdanović, Natalija; Stanić, Ana; mentor: Drašković Dražen

# Ponedjeljak, 10. mart 2025.

**Panel diskusija #1**  
**Šta menadžment očekuje,**  
**a šta ima od primene veštačke inteligencije?**

17:00-18:00,  
sala „Pančić 1“

Veštačka inteligencija (AI) donosi revolucionarne promene u poslovanju, ali izaziva i mnoga pitanja - kako je efikasno primeniti i šta menadžment zapravo može da očekuje od nje? Dok AI obećava optimizaciju procesa, uštedu resursa i bolje donošenje odluka, praksa često pokazuje izazove u implementaciji, integraciji sa postojećim sistemima i postizanju konkretnih rezultata. Na ovom panelu ćemo diskutovati o realnim očekivanjima menadžmenta, razlikama između teorijskih potencijala i praktične primene, kao i o tome kako premostiti jaz između tehnoloških mogućnosti i poslovnih potreba. Ključno pitanje koje ćemo razmotriti jeste – da li AI donosi dovoljno vrednosti da opravda investicije i transformiše poslovanje na način koji menadžment priželjkuje?

**KONFERENCIJSKA ŽURKA**  
**„Rok veče“ uz Medicine bend**  
**@Pub & Ko, “Konaci”**



**Sponzor žurke - kompanija SAGA**

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# Utorak, 11. mart 2025.

<b>Sesija YU #4: Softverski sistemi i savremene informacione tehnologije</b>	
<b>16:00-18:00, sala „Sunčani vrhovi“</b>	
<b>Moderatori:</b>	<b>Prof. dr Marko Mišić (Univerzitet u Beogradu, Elektrotehnički fakultet)</b>

R.br.	Naslov rada	Autori
4.01.	Time analysis of the integration process using Simpson's Rule on multicore-processors in Java	Smilić, Marko; Stefanović, Časlav; Milić, Dejan; <b>Djurović, Sanja</b> ; Đošić, Danijel
4.02.	Uparedna analiza radnih okvira Angular, React i Flutter na osnovu implementacije aplikacije za poslastičarnicu	<b>Tufegdžić, Janko</b> ; Hrvačević, Luka; Potkonjak, Iva; Mutavdžić, Uroš; Cincović, Jelica; Punt, Marija
4.03.	Pregled pozicionih algoritama u proširenoj i virtuelnoj stvarnosti	<b>Ogrizović, Mihajlo</b> ; Janković, Filip; Ilić, Aleksa; Drašković, Dražen
4.04.	Analiza performansi različitih algoritama broadcast komunikacije u Open MPI biblioteci	<b>Nastić, Miloš</b> ; Mišić, Marko; Vuletić, Pavle; Protić, Jelica
4.05.	Analiza algoritama dokaza bez znanja u blokčejn tehnologiji	<b>Obradović, Miloš</b> ; Vuletić, Pavle
4.06.	Bezbednosna kultura u razvoju novih servisa: Organizacione mere i edukacija zaposlenih	<b>Divac, Jelena</b> ; Marenović, Neda
4.07.	Fiksni bežični pristup (FWA) – tehnologije, primena i perspektive	<b>Nemec, Dejan</b>
4.08.	Evolucija RAN arhitektura: Od distribuiranih sistema do naprednih Open RAN modela u eri 5G	<b>Stefanović, Katarina</b>
4.09.	Prednosti i izazovi primene prenosnih baznih stanica mobilne telefonije	<b>Nemec, Dejan</b>

# Utorak, 11. mart 2025.

<b>Sesija YU #5:</b> <b>Informacioni sistemi, računarske simulacije i edukacija</b>	
<b>18:00-20:00, sala „Sunčani vrhovi“</b>	
<b>Moderatori:</b>	<b>Prof. dr Marija Punt</b> <b>(Univerzitet u Beogradu, Elektrotehnički fakultet)</b>

R.br.	Naslov rada	Autori
5.01.	Migracija i konverzija SAP ERP na S/4 HANA tehnološku platformu	<b><u>Gacic, Miodrag</u></b>
5.02.	Unapređenje performansi visokoškolskih institucija primenom analitike	<b><u>Škembarević, Milica;</u></b> Đukić, Marija; Savić, Gordana; Aničić, Nenad; Andrić Gušavac, Bisera; Popović, Milena; Lečić-Cvetković, Danica
5.03.	Analiza uticaja FONIS hakatona na razvoj karijere studenata	<b><u>Kostić, Dušan;</u></b> Jolović, Miloš; Joksimović, Aleksandar; Naumović, Tamara; Lukovac, Petar
5.04.	Upravljački podsistem za praćenje, unapređenje i kontrolu materijalnih tokova u proizvodnji industrije prerade drveta	<b><u>Čosić, Ksenija;</u></b> Antić, Slobodan; Tulimirović, Nemanja
5.05.	Simulacija energetski balansiranog modela klimatskih promena u programskom jeziku Python	<b><u>Kablar, Nataša</u></b>
5.06.	Razvoj i testiranje aplikacije za komunikaciju zasnovane na WebSocket tehnologiji u programskom jeziku Go	<b><u>Mijatović, Mihailo;</u></b> Tot, Ivan
5.07.	Simulacija rada 3D modela disk kočnice	<b><u>Stojadinović, Dragan</u></b>
5.08.	Primena RAG (Retrieval-Augmented Generation) sistema u nastavi fizike	<b><u>Babović, Zoran</u></b> Kovačević, Miloš Minović, Mihajlo

# Sreda, 12. mart 2025.

## Sesija YU #6: Vojne simulacije i primene

9:00-11:30, sala „Pančić 1“

**Moderator:** **Prof. dr Miodrag Ivković**  
**(Univerzitet u Novom Sadu, Fakultet tehničkih nauka)**

R.br.	Naslov rada	Autori
6.01.	Realizacija autonomnog kretanja na besposadnoj platformi	<b>Pavlovic, Rade;</b> Mitričević, Nina
6.02.	Koncept Android aplikacije za razmenu šifrovanih i digitalno potpisanih poruka elektronske pošte	<b>Pavlovic, Filip;</b> Dimitrijevic, Nenad; Milovanovic, Nikola; Citic, Nikola
6.03.	Artificial Intelligence and Military Command Information Systems: Current State and Expected Challenges	<b><u>Vulić, Ivan</u></b>
6.04.	Analiza tačnosti identifikacije parametara funkcije prenosa kanala propinjanja rakete malog dometa primenom iterativnih metoda	<b><u>Stošić, Darko</u></b>
6.05.	Merenje intenziteta svetlosti, dometa svetlosnog snopa i provera zaptivenosti ručne taktičke lampe	<b><u>Jovanović, Milena</u></b>
6.06.	Termovizijsko praćenje toplotnih efekata borbene opreme pri različitim fizičkim aktivnostima korisnika	<b><u>Tripković, Marina</u></b>
6.07.	Analiza podataka o saobraćajnim nezgodama sa socio-ekonomskog aspekta korišćenjem sistema poslovne inteligencije	<b><u>Atanasijevic, Jordan;</u></b> Djukic, Dejan; Tot, Ivan
6.08.	Primena CMMN notacije u modelovanju dinamičnih poslovnih procesa i upravljanju slučajevima	<b><u>Atanasijevic, Jordan;</u></b> Viduka, Dejan; Tot, Ivan
6.09.	Interpolacija kubnim splajnom korišćenjem programskog paketa <i>Wolfram Mathematica</i>	<b><u>Atanasijevic, Jordan;</u></b> Djukic, Dejan; Tot, Ivan
6.10.	Predikcija efikasnog položaja radio-ometača primenom algoritama veštačke inteligencije	<b><u>Pejić, Ognjen;</u></b> Šepa, Nemanja; Sazdić-Jotić, Boban
6.11.	Mogućnost primene veštačke inteligencije za poboljšanje mentalne higijene u sistemu odbrane	<b><u>Gajic, Tamara;</u></b> Stanković, Dragan; Stajković, Nenad; Belotić, Branislav; Vasić, Nikola



**ICIST2025**

International Conference on Information Society and Technologies  
Kopaonik, Serbia 9-12 March, 2025

15<sup>th</sup> INTERNATIONAL CONFERENCE

ON

**INFORMATION  
SOCIETY AND  
TECHNOLOGY**

**CONFERENCE  
PROGRAM**

March, 9-12, 2025.

Congress center  
„GRAND“ hotel

Kopaonik, SERBIA

# INTRODUCTION

ICIST Conference series is one of the top IT scientific events in the region, with 90-100 papers presented each year, average of 200 participants per edition, attended also by the number of IT industry representatives in the region. It hosts distinguished scientists' keynotes (in past years, we were honored to share the stage with Richard Mark Soley, Orri Erling, Howard Moskowitz, Bran Selić and others), scientific sessions, panel discussions, industry presentations with exciting social programme for motivated and successful networking. It is a perfect venue for networking, dissemination of recent research results, getting new project ideas, finding new scientific partners, and bringing great vibes back home.

The conference is open for all scientific contributions to the different areas of ICT. It also welcomes technical papers with case studies and demonstrations of novel ICT technologies and approaches in industry and society. It hosts loyal research communities dealing with the areas of information systems, model-based software engineering, e-government, big data, biomedical engineering, semantic web research and since recently, Internet of Things.

All accepted papers will be published in ISOS Conference Proceedings Series book with title Proceedings of the 15<sup>th</sup> International Conference on Information Society and Technology or Springer's Lecture Notes book.



# Monday, March, 10<sup>th</sup>, 2025

## ICIST#1: Special track: Autonomous driving

13:30-15:30, conference room „Pančić 2“

ID	Title	Authors
11.01.	A Real-Time Detector for Road Damage Detection	Fujiang Yu* <sup>1</sup> ; Jing Jin <sup>1</sup> <sup>1</sup> <i>Harbin Institute of Technology</i>
11.02.	A Semantic Segmentation-Based Vision Navigation Method for Seedling Inspection	Libo Zhang* <sup>1</sup> ; Jing Jin <sup>1</sup> ; Yanshu Ni <sup>1</sup> ; Yi Liu <sup>1</sup> ; Suxun Zhu <sup>1</sup> ; Longfei Ci <sup>1</sup> ; Delin Qu <sup>1</sup> <sup>1</sup> <i>Harbin Institute of Technology</i>
11.03.	Transformer-Based Vehicle Trajectory Generation Model	闫万* <sup>1</sup> <sup>1</sup> <i>Harbin Institute of Technology</i>
11.04.	HiFiAgent: High Fidelity Interactive Agent Simulation for Autonomous Driving	Jinlong Cui* <sup>1</sup> ; Jianxun Cui <sup>1</sup> ; Anyang Su <sup>2</sup> ; Xin Liu <sup>3</sup> ; Miroslav Milovanovic <sup>4</sup> ; Marko Milojković <sup>4</sup> <sup>1</sup> <i>Harbin Institute of Technology</i> <sup>2</sup> <i>Jilin University</i> <sup>3</sup> <i>Tsinghua University</i> <sup>4</sup> <i>University of Niš, Faculty of Electronic Engineering, Department of Control Systems</i>
11.05.	High-fidelity simulation model of dynamic traffic flow based on Diffusion model	Huidong Gao* <sup>1</sup> ; Jianxun Cui <sup>1</sup> ; Anyang Su <sup>2</sup> ; Xing Liu <sup>3</sup> ; Stanisa Peric <sup>4</sup> <sup>1</sup> <i>Harbin Institute of Technology</i> <sup>2</sup> <i>College of Software, Jilin University</i> <sup>3</sup> <i>Department of Hydraulic Engineering, Tsinghua University, Beijing, China</i> <sup>4</sup> <i>University of Niš, Faculty of Electronic Engineering, Department of Control Systems</i>
11.06.	Initial scenario generation model for testing autonomous vehicle based on probabilistic graphical model	Qirui Hou <sup>1</sup> ; Jianxun Cui <sup>1*</sup> ; Anyang Su <sup>2</sup> ; Xing Liu <sup>3</sup> ; Miroslav Milovanovic <sup>4</sup> <sup>1</sup> <i>Harbin Institute of Technology</i> <sup>2</sup> <i>College of Software, Jilin University</i> <sup>3</sup> <i>Department of Hydraulic Engineering, Tsinghua University, Beijing, China</i> <sup>4</sup> <i>University of Niš, Faculty of Electronic Engineering, Department of Control Systems</i>
11.07.	EMIFF-Sim: Efficient Multi-Information Fusion Framework for High-Fidelity Trajectory Simulation	Yuxuan Wu <sup>1*</sup> ; Jianxun Cui <sup>1</sup> ; Xing Liu <sup>2</sup> ; Anyang Su <sup>3</sup> ; Marko Milojković <sup>4</sup> ; Miroslav Milovanovic <sup>4</sup> <sup>1</sup> <i>Harbin Institute of Technology</i> <sup>2</sup> <i>Department of Hydraulic Engineering, Tsinghua University, Beijing, China</i> <sup>3</sup> <i>College of Software, Jilin University</i> <sup>4</sup> <i>University of Niš, Faculty of Electronic Engineering, Department of Control Systems</i>

11.08.	A Novel Auto-Encoder Method For Infrared and Visible Multi-Channel Image Fusion Based on Deep Learning	Longfei Ci <sup>1*</sup> ; Jing Jin <sup>1</sup> ; Yanshu Ni <sup>1</sup> ; Suxun Zhu <sup>1</sup> ; Libo Zhang <sup>1</sup> ; Delin Qu <sup>1</sup> <sup>1</sup> 哈尔滨工业大学
11.09.	Traj-MLLM: A multi-modal large language model based method for interactive behavior extraction	Mingxuan Mu <sup>1*</sup> ; Jianxun Cui <sup>1</sup> ; Anyang Su <sup>2</sup> ; Xing Liu <sup>3</sup> ; Stanisa Peric <sup>4</sup> <sup>1</sup> Harbin Institute of Technology <sup>2</sup> College of Software, Jilin University <sup>3</sup> Department of Hydraulic Engineering, Tsinghua University, Beijing, China <sup>4</sup> University of Niš, Faculty of Electronic Engineering, Department of Control Systems
11.10.	ICE-Skills: A Curling Robot Skill Pre-training Framework Based on Multimodal Data and Instruction Re-annotation	Yanshu Ni <sup>1*</sup> ; Jing Jin <sup>1</sup> ; Libo Zhang <sup>1</sup> ; Longfei Ci <sup>1</sup> ; Suxun Zhu <sup>1</sup> ; Delin Qu <sup>1</sup> <sup>1</sup> Harbin Institute of Technology
11.11.	Approximation of vehicle route costs based on a deep learning	Karlo Bala <sup>1*</sup> ; Dejan Brčanov <sup>2</sup> ; Nebojša Gvozdenović <sup>2</sup> ; Andrea Rožnjik <sup>3</sup> <sup>1</sup> The Institute for Artificial Intelligence Research and Development of Serbia <sup>2</sup> Faculty of Economics, University of Novi Sad <sup>3</sup> Faculty of Civil Engineering Subotica

# Monday, March, 10<sup>th</sup>, 2025

## ICIST#2: Special track: Digital Water

15:30-17:00, conference room „Pančić 1“

ID	Title	Authors
12.01.	Spatio-Temporal Multy-day Streamflow Forecasting Using Graph Neural Networks	Ana Dodig <sup>1*</sup> ; Luka Vinokic <sup>1</sup> ; Milan Dotlic <sup>1</sup> ; Vanja Svenda <sup>1</sup> ; Veljko Prodanovic <sup>1</sup> ; Milan Stojkovic <sup>1</sup>  <sup>1</sup> <i>The Institute for Artificial Intelligence of Serbia</i>
12.02.	Machine Learning Techniques for Daily Reservoir Inflow Forecasting: A Case Study on Drina-Lim Hydropower Plants	Luka Vinokić <sup>1*</sup> ; Milan Dotlić <sup>1</sup> ; Ana Dodig <sup>1</sup> ; Vanja Švenda <sup>1</sup> ; Veljko Prodanović <sup>1</sup> ; Milan Stojković <sup>1</sup>  <sup>1</sup> <i>The Institute for Artificial Intelligence of Serbia</i>
12.03.	Assimilation method for hydrology models: FEWS Kolubara case study	Luka Stojadinović <sup>1*</sup> ; Miloš Milašinović; Darko Janjić <sup>3</sup> ; Nikola Milivojević <sup>1</sup>  <sup>1</sup> <i>Jaroslav Černi Water Institute</i> <sup>2</sup> <i>University of Belgrade, Faculty of Civil Engineering</i> <sup>3</sup> <i>PWC Srbijavode</i>
12.04.	DIGIDRAIN: City-scale digital twins for urban drainage systems	Miloš Milašinović <sup>1*</sup> ; Anja Randjelović <sup>1</sup> ; Damjan Ivetic <sup>1</sup> ; Robert Ljubičić <sup>1</sup> ; Željko Vasilić <sup>1</sup> ; Ognjen Govedarica <sup>1</sup> ; Ljiljana Brajović <sup>1</sup> ; Milan Gocić <sup>2</sup> ; Luka Vinokić <sup>3</sup> ; Veljko Prodanović <sup>3</sup>  <sup>1</sup> <i>University of Belgrade - Faculty of Civil Engineering</i> <sup>2</sup> <i>University of Niš - Faculty of Civil Engineering and Architecture</i> <sup>3</sup> <i>The Institute for Artificial Intelligence Research and Development of Serbia</i>
12.05.	High Performance Computing Platform for Resilience Assessment in Dams	Vladimir Milivojević <sup>1*</sup> ; Vukašin Ćirović <sup>1</sup> ; Uroš Mirković <sup>1</sup> ; Milan Stojković <sup>2</sup>  <sup>1</sup> <i>Jaroslav Černi Water Institut</i> <sup>2</sup> <i>The Institute for Artificial Intelligence of Serbia</i>
12.06.	SSIMS-Flow: Towards user-friendly image velocimetry	Robert Ljubičić <sup>1*</sup> ; Budo Zindović <sup>1</sup> ; Silvano Fortunato Dal Sasso <sup>2</sup>  <sup>1</sup> <i>Faculty of Civil Engineering, University of Belgrade</i> <sup>2</sup> <i>DIUSS, University of Basilicata</i>
12.07.	AI-based software platform for flood prediction and prevention	Boško Laković <sup>1</sup> ; Dušan Stefanović <sup>1</sup> ; Nikola Bojović <sup>1</sup> ; Boban Stojanović <sup>2*</sup>  <sup>1</sup> <i>Vodena, Kragujevac</i> <sup>2</sup> <i>University of Kragujevac, Faculty of Science</i>

# Monday, March, 10<sup>th</sup>, 2025

## ICIST#3: Special track

### Generative AI and Large Language Models, Session 1

15:30-17:00, conference room „Pančić 2“

ID	Title	Authors
13.01.	Evaluation of Preprocessing and Classification of Court Decisions Using ChatGPT and Neural Networks	Jelena Matković <sup>1*</sup> ; Marko Marković <sup>1</sup> <sup>1</sup> <i>University of Novi Sad</i>
13.02.	Software Solution for Recommending Court Rulings using Case Similarity	Mihaela Osmajić <sup>1*</sup> ; Marko Marković <sup>1</sup> ; Goran Savić <sup>1</sup> ; Stevan Gostojić <sup>1</sup> ; Milan Segedinac <sup>1</sup> <sup>1</sup> <i>Faculty of Technical Sciences, University of Novi Sad</i>
13.03.	Domain adaptation of large language model tokenizers – a comparison of performances	Miloš Bogdanović <sup>1*</sup> ; Milena Frtunić Gligorijević <sup>1</sup> ; Jelena Kocić <sup>1</sup> ; Leonid Stoimenov <sup>1</sup> <sup>1</sup> <i>Faculty of Electronic Engineering, University of Nis</i>
13.04.	Data-centric ASR for Serbian Language	Vladimir Vincan <sup>1*</sup> <sup>1</sup> <i>The Institute for Artificial Intelligence Research and Development of Serbia</i>
13.05.	A Comprehensive Review of Large Language Models for Document-Based Question Answering	Matija Dodović <sup>1*</sup> ; Janko Tufegdžić <sup>1</sup> ; Luka Hrvačević <sup>1</sup> ; Dražen Drašković <sup>1</sup> <sup>1</sup> <i>School of Electrical Engineering, University of Belgrade</i>
13.06.	Plagiarism Detection of Student Assignments: The Application of Retrieval-Augmented Generation and Vector Database	Elena Akik <sup>1*</sup> ; Marko Vještica <sup>1</sup> ; Miroslav Tomić <sup>1</sup> ; Jelena Slivka <sup>1</sup> ; Milan Čeliković <sup>1</sup> ; Slavica Kordić <sup>1</sup> <sup>1</sup> <i>University of Novi Sad, Faculty of Technical Sciences</i>
13.07.	Generative Artificial Intelligence as a Tool for Improving the Accuracy of Classification Models	Ulfeta Marovac <sup>1*</sup> ; Aldina Avdić <sup>1</sup> <sup>1</sup> <i>State university of Novi Pazar</i>
13.08.	Automated Chemical Research with Multi-Agent Collaboration and Molecular Transformers in a Case Study of Aspirin Synthesis	Ivana Krtolica <sup>1*</sup> <sup>1</sup> <i>The Institute for Artificial Intelligence Research and Development of Serbia</i>
13.09	Application of a multi-agent system for monitoring market trends on the example of cryptocurrencies	Ulfeta Marovac <sup>1*</sup> ; Dalila Pramenković <sup>1</sup> ; Admir Hamzagić <sup>1</sup> <sup>1</sup> <i>State university of Novi Pazar</i>

# Monday, March, 10<sup>th</sup>, 2025

## ICIST Poster session

**17:00-18:00, Lobby in front of rooms Pančić 1 and 2**

ID	Title	Authors
P.01.	IT support for customer relationship management according to the guidelines of the ISO 10001 standard	Jelena Ruso <sup>1*</sup> <sup>1</sup> Faculty of Organizational Sciences, University of Belgrade
P.02.	Implementation of Data Management Overlay Service in Distributed Cloud	Milena Jelić <sup>1*</sup> ; Miloš Simić <sup>1</sup> <sup>1</sup> Faculty of Technical Sciences, University of Novi Sad
P.03.	Tool for automating template changes of static web pages and sending notifications via email	Miloš Milošević <sup>1*</sup> ; Marija Punt <sup>1</sup> <sup>1</sup> School of Electrical Engineering, University of Belgrade
P.04.	Social Engineering Challenges	Aleksandar Bulajić
P.05.	Development of a MACH-Based Virtual Laboratory for AI-Driven Digital Signal Processing in IoT	Gokmen Katipoglu <sup>1</sup> ; Semih Utku <sup>1</sup> ; Edis Mekic <sup>2*</sup> <sup>1</sup> Institute of Science, Dokuz Eylul University, Tinaztepe Kampusu, Buca, Izmir 35390 <sup>2</sup> State University of Novi Pazar
P.06.	A Deep Learning Approach to Detecting Aggressive Drivers Using Behavioral and Environmental Metrics	Milena Nikolic <sup>1*</sup> ; Milan Stankovic <sup>1</sup> ; Milos Stojanovic <sup>1</sup> ; Marina Marjanovic <sup>2</sup> <sup>1</sup> The Academy of Applied Technical and Preschool Studies <sup>2</sup> Singidunum University
P.07.	Development of a Rule-Based Knowledge System for Lung Cancer Diagnosis	Branislav Stojković <sup>1</sup> ; Dragana Filipović <sup>1</sup> ; Anđela Trajković <sup>1</sup> ; Siniša Nikolić <sup>1*</sup> <sup>1</sup> University of Novi Sad, Faculty of Technical Sciences, Novi Sad
P.08.	Digital Agriculture and Land Consolidation	Žarko Nestorović <sup>1*</sup> <sup>1</sup> EPS AD Belgrade
P.09.	Localization, Communication, and Unified Sensing (LOCUS)	Vladimir Đapić <sup>1*</sup> <sup>1</sup> The institute for artificial intelligence research and development of Serbia
P.10.	Energy and Exergy Analysis of Low Temperature District Heating	Dejan Mitrović <sup>1</sup> ; Marko Ignjatović <sup>1</sup> ; Ivan Ćirić <sup>1</sup> ; Dušan Stojiljković <sup>1*</sup> <sup>1</sup> Faculty of Mechanical Engineering, University of Niš
P.11.	Primary Energy Consumption of Hybrid Heat Pump Systems with Cost-Optimal Operation	Mirko Stojiljković <sup>1*</sup> ; Goran Vučković <sup>1</sup> ; Marko Ignjatović <sup>1</sup> <sup>1</sup> University of Niš, Faculty of Mechanical Engineering in Niš

# Monday, March, 10<sup>th</sup>, 2025

## ICIST#4: Special track

### AI & IoT for Smart Industry, Session 1

18:30-20:00, conference room „Pančić 2“

ID	Title	Authors
4.01.	Agriculture Meets Artificial Intelligence -Challenges and Current Status in Serbia	Marija Đukić <sup>1*</sup> ; Aleksandra Sretenović <sup>1</sup> ; Ana Pajić Simović <sup>1</sup> ; Ognjen Pantelić <sup>1</sup> <i><sup>1</sup> Faculty of Organizational Sciences, University of Belgrade</i>
4.02.	Assessment of the Potential of Sentinel-2 Remote Sensing Data for Supporting Logistics Planning and Enhancing Intelligent Transport Systems at Border Crossings in Serbia	Anđela Marković <sup>1*</sup> ; Nenad Gligorić <sup>2</sup> <i><sup>1</sup> University of Belgrade, School of Electrical Engineering <sup>2</sup> Zentrix Lab</i>
4.03.	Enhancing Thermal Imaging Accuracy: Emissivity and Reflected Temperature Estimation for Pipeline Applications	Rajko Turudija <sup>1*</sup> ; Aleksandar Trajković <sup>1</sup> ; Dušan Stojiljković <sup>1</sup> ; Nikola Ivačko <sup>1</sup> ; Milan Banić <sup>1</sup> <i><sup>1</sup> University of Nis - Faculty of Mechanical Engineering</i>
4.04.	Predicting Gas Consumption for Energy Savings and Cost Reduction in District Heating Systems Using Decision Tree Algorithms	Milica Tasic <sup>1*</sup> ; Ivan Ciric <sup>1</sup> ; Dejan Mitrovic <sup>1</sup> ; Ana Kitic <sup>1</sup> ; Marko Ignjatovic <sup>1</sup> ; Milica Ciric <sup>2</sup> ; Stevica Cvetkovic <sup>3</sup> <i><sup>1</sup> University of Nis - Faculty of Mechanical Engineering <sup>2</sup> Faculty of Civil Engineering and Architecture <sup>3</sup> Faculty of Electronic Engineering, University of Niš</i>
4.05.	Synthetic Data for Smart Manufacturing: Opportunities and Challenges	Bojana Bajic <sup>1*</sup> ; Milovan Medojevic <sup>1</sup> ; Theofanis Raptis <sup>2</sup> ; Aleksandar Rikalovic <sup>3</sup> <i><sup>1</sup> The Institute for Artificial Intelligence Research and Development of Serbia <sup>2</sup> Institute of Informatics and Telematics, National Research Council, 56124 Pisa, Italy <sup>3</sup> Department of Industrial Engineering and Management, Faculty of Technical Sciences, University of Novi Sad</i>
4.06.	Unsupervised Online Detection and Isolation of Abrupt Faults	Nikola Marković <sup>1*</sup> <i><sup>1</sup> The Institute for Artificial Intelligence Research and Development of Serbia</i>
4.07.	Edge AI for Industry 5.0: Challenges and opportunities	Marko Tošić <sup>1</sup> ; Milovan Medojevic <sup>1*</sup> ; Bojana Bajić <sup>1</sup> ; Aleksandar Rikalović <sup>1</sup> <i><sup>1</sup> The Institute for Artificial Intelligence Research and Development of Serbia</i>

4.08.	Remote-Controlled Vehicle with Integrated Environmental Vision and Sensing Systems	Mladen Milic <sup>1</sup> ; Milovan Medojevic <sup>1*</sup> <sup>1</sup> <i>The Institute for Artificial Intelligence Research and Development of Serbia</i>
4.09.	A Multi-Model Approach for Forecasting Building Heat Demand	Mirko Stojiljković <sup>1*</sup> ; Marko Ignjatović <sup>1</sup> ; Goran Vučković <sup>1</sup> ; Vladan Jovanović <sup>1</sup> <sup>1</sup> <i>University of Niš, Faculty of Mechanical Engineering in Niš</i>

# Tuesday, March, 11<sup>th</sup>, 2025

## ICIST#5: Regular session Software Engineering

15:30-17:30, conference room „Pančić 1“

ID	Title	Authors
15.01.	Enhancing Software Architecture with Ontologies and Controlled Natural Language	Nenad Gligorov <sup>1*</sup> ; Milan Segedinac <sup>1</sup> <sup>1</sup> Faculty of Technical Sciences, Novi Sad
15.02.	Real Function Approximation Around a Point with Taylor Polynomials Using Custom Machine Code	Andreja Janković <sup>1*</sup> <sup>1</sup> School of Electrical Engineering, University of Belgrade
15.03.	Automated merging of multi-source citation data: an open-source toolkit	Dušan Nikolić <sup>1*</sup> ; Dragan Ivanović <sup>1</sup> <sup>1</sup> University of Novi Sad
15.04.	Monitoring the distributed cloud: Metric collection and aggregation	Tamara Ranković <sup>1*</sup> ; Nemanja Pokornić <sup>1</sup> ; Aleksandar Pavlović <sup>1</sup> ; Miloš Simić <sup>1</sup> <sup>1</sup> Faculty of Technical Sciences, University of Novi Sad
15.05.	Scalable and Fast Network Traffic Classification Through Distributed Approximate KNN	Ivan Mršulja <sup>1*</sup> ; Miloš Popović <sup>1</sup> ; Jelena Slivka <sup>1</sup> <sup>1</sup> Faculty of Technical Sciences, University of Novi Sad
15.06.	Stochastic Optimization Algorithms for Determining Optimal Weights in Multi Criteria Decision Analysis	Igor Jovanović <sup>1*</sup> <sup>1</sup> Institute Mihajlo Pupin
15.07.	Decentralized reconfiguration management in distributed clouds	Miloš Simić <sup>1*</sup> ; Boris Lauš <sup>1</sup> ; Tamara Ranković <sup>1</sup> <sup>1</sup> Faculty of Technical Sciences, University of Novi Sad
15.08.	Query Processing on Encrypted Data: A Comparative Study of Modern Approaches	Aleksa Vidaković <sup>1*</sup> ; Teodor Petrović <sup>1</sup> ; Petar Kresoja <sup>1</sup> ; Mladen Veinović <sup>1</sup> <sup>1</sup> Singidunum University
15.09.	Building Blocks for Object-Oriented Refactoring Engines	Balša Šarenac <sup>1*</sup> ; Stéphane Ducasse <sup>2</sup> ; Guillermo Polito <sup>2</sup> ; Gordana Rakić <sup>1</sup> <sup>1</sup> Faculty of Technical Sciences <sup>2</sup> University Lille, Inria, CNRS
15.10.	Implementation of a web application for creating, editing and managing attack trees	Jelisaveta Jevtić <sup>1</sup> ; Žarko Stanisavljević <sup>1</sup> ; Maja Vukasović <sup>1</sup> <sup>1</sup> School of Electrical Engineering, University of Belgrade



# Tuesday, March, 11<sup>th</sup>, 2025

## ICIST#6: Special track

### ICT for health, well-being and sport, Session 1

15:30-17:00, conference room „Pančić 2“

ID	Title	Authors
16.01.	Analysis of behavioral patterns in online gambling using artificial intelligence and clinical practice	Eleonora Milic <sup>1*</sup> ; Bratislav Predic <sup>1</sup> ; Suzana Tošić Golubović <sup>2</sup>  <sup>1</sup> Faculty of Electronic Engineering, University of Niš <sup>2</sup> Faculty Of Medicine
16.02.	A Deep Learning Method in the Evaluation of Pain in Horses Based on Facial Expressions Images	Marcelo Rudek <sup>1*</sup> ; Gabrielle Batista Garcia <sup>1</sup> ; Pedro Michelotto Junior <sup>1</sup> ; Laís Cristine Werner <sup>1</sup>  <sup>1</sup> Pontificia Universidade Católica do Paraná - PUCPR
16.03.	STRATIFYHF project - Voice recognition as a novel tool to diagnose heart failure	Đorđe Jakovljević <sup>1*</sup>  <sup>1</sup> Coventry University
16.04.	A Mixed Reality Approach for Movement Analysis Based on Immersive Simulation in Rehabilitation	Marcelo Rudek <sup>1*</sup> ; Luiz Carlos Teixeira Junior <sup>1</sup>  <sup>1</sup> Pontificia Universidade Católica do Paraná - PUCPR
16.05.	Dataset collection and preliminary machine learning results in darts	Val Vec <sup>1*</sup> ; Sašo Tomažič <sup>1</sup> ; Anton Kos <sup>1</sup> ; Anton Umek <sup>1</sup>  <sup>1</sup> Univerza v Ljubljani, Fakulteta za elektrotehniko
16.06.	Development of a Telepsychology Platform Mobile Application for Selective Attention Testing with EEG Monitoring	Filip Djordjevic <sup>1*</sup> ; Nikola Petrovic <sup>1</sup> ; Vasilije Bursac <sup>1</sup>  <sup>1</sup> Faculty of Technical Sciences, University of Novi Sad, Novi Sad
16.07.	Diffusion-based classifier for mammography images	Nikola Jovišić <sup>1*</sup> ; Milica Škipina <sup>1</sup> ; Vanja Švenda <sup>1</sup> ; Slobodan Ilić <sup>1</sup> ; Dubravko Čulibrk <sup>1</sup>  <sup>1</sup> The Institute for Artificial Intelligence Research and Development of Serbia

# Tuesday, March, 11<sup>th</sup>, 2025

## ICIST#7: Special track Generative AI and Large Language Models, Session 2 (Room Pančić 2)

17:00-18:30, conference room „Pančić 2“

ID	Title	Authors
17.01.	Improving customer service with automatic topic detection in user emails	Bojana Bašaragin <sup>1*</sup> ; Darija Medvecki <sup>1</sup> ; Gorana Gojić <sup>1</sup> ; Milena Oparnica <sup>1</sup> ; Dragiša Mišković <sup>1</sup> <sup>1</sup> <i>The Institute for Artificial Intelligence Research and Development of Serbia</i>
17.02.	Large language models and retrieval augmented generation in education	Dijana Oreški
17.03.	Learning Word Embeddings using Lexical Resources and Corpora	Ranka Stanković <sup>1*</sup> ; Jovana Rađenović <sup>1</sup> ; Mihailo Škorić <sup>1</sup> ; Marko Putniković <sup>2</sup> <sup>1</sup> <i>University of Belgrade, Faculty of Mining and Geology</i> <sup>2</sup> <i>University of Belgrade</i>
17.04.	srbNLI: Pioneering Natural Language Inference for Serbian	Miloš Košprdić <sup>1*</sup> ; Adela Ljajić <sup>1</sup> ; Nikola Milošević <sup>1</sup> <sup>1</sup> <i>The Institute for Artificial Intelligence Research and Development of Serbia</i>
17.05.	Named Entity Recognition for Serbian Legal Documents: Design, Methodology and Dataset Development	Vladimir Kalušev <sup>1*</sup> ; Branko Brkljač <sup>2</sup> <sup>1</sup> <i>The Institute for Artificial Intelligence Research and Development of Serbia</i> <sup>2</sup> <i>Faculty of Technical Sciences, University of Novi Sad</i>
17.06.	The Evaluation of Retrieval Augmented Generation systems for domain-specific Question Answering in Serbian language	Mina Nikolic <sup>1*</sup> ; Aleksandar Stanimirović <sup>1</sup> ; Leonid Stoimenov <sup>1</sup> <sup>1</sup> <i>Faculty of Electronic Engineering, Niš, Serbia</i>
17.07.	LLM-Driven Misconfiguration Detection for Self-Healing Helm Charts	Gorana Radovanovic <sup>1*</sup> <sup>1</sup> <i>Faculty of Electronic Engineering, Niš, Serbia</i>
17.08.	Expense tracker using LLM: Mobile application with scanning receipts issued in Serbia	Mia Vučinić <sup>1</sup> ; Uroš Radenković <sup>1</sup> ; Marko Mićović <sup>1</sup> ; Vladimir Jocović <sup>1</sup> <sup>1</sup> <i>School of Electrical Engineering, University of Belgrade</i>
17.09.	From Documents to Answers: A University-Focused DBQA System with LLMs	Matija Dodović <sup>1*</sup> ; Janko Tufegdžić <sup>1</sup> ; Luka Hrvačević <sup>1</sup> ; Dražen Drašković <sup>1</sup> <sup>1</sup> <i>School of Electrical Engineering, University of Belgrade</i>

# Tuesday, March, 11<sup>th</sup>, 2025

## ICIST#8: Special track

### AI & IoT for Smart Industry, Session 2

18:00-20:00, conference room „Pančić 1“

ID	Title	Authors
18.01.	On the local feature importance and counterfactuals in heat demand forecasting	Milan Zdravkovic <sup>1*</sup> <sup>1</sup> Faculty of Mechanical Engineering, University of Niš
18.02.	Conformal prediction for predictive maintenance applications	Ognjen Kundacina <sup>1*</sup> <sup>1</sup> The Institute for Artificial Intelligence Research and Development of Serbia
18.03.	Correlation analysis between sound features and cutting force components in turning process	Vladimir Mitrović <sup>1*</sup> ; Milan Zdravković <sup>1</sup> ; Milan Trifunović <sup>1</sup> ; Predrag Janković <sup>1</sup> ; Miloš Madić <sup>1</sup> <sup>1</sup> Faculty of Mechanical Engineering, University of Niš, Serbia
18.04.	IoT platform architecture for interoperability in smart building energy management	Lazar Berbakov <sup>1*</sup> ; Nikola Tomašević <sup>1</sup> ; Marko Batić <sup>1</sup> <sup>1</sup> Institute "Mihajlo Pupin", Belgrade, Serbia
18.05.	Estimation of Total Operation Time in Turning of a Part With Complex Geometry Using Regression Machine Learning Models	Aleksandar Trajković <sup>1*</sup> ; Miloš Madić <sup>1</sup> ; Milan Trifunović <sup>1</sup> <sup>1</sup> Faculty of Mechanical Engineering, University of Niš
18.06.	Immersive CNC Lathe Operation Training: A Virtual Reality Approach for Education	Rajko Turudija <sup>1*</sup> ; Nikola Vitković <sup>1</sup> ; Miodrag Manić <sup>1</sup> ; Marek Chodnicki <sup>2</sup> ; Miloš Stojković <sup>1</sup> <sup>1</sup> Faculty of Mechanical Engineering, University of Niš <sup>2</sup> Gdańsk University of Technology, Faculty of Mechanical Engineering and Ship Technology, Institute of Mechanics and Machine Design
18.07.	Toward Advancing Industrial Cyber-Physical Data Utilization and Resilience through Pervasive Intelligence	Theofanis Raptis <sup>1*</sup> ; Bojana Bajic <sup>2</sup> ; Milovan Medojevic <sup>2</sup> ; Aleksandar Rikalovic <sup>2</sup> <sup>1</sup> National Research Council (CNR), Italy <sup>2</sup> The Institute for Artificial Intelligence Research and Development of Serbia
18.08.	Benchmarking the Efficiency of Energy Use in Smart Homes	Marko Jelić <sup>1*</sup> ; Dea Jelić <sup>1</sup> ; Lazar Berbakov <sup>1</sup> ; Marko Batić <sup>1</sup> <sup>1</sup> Institute "Mihajlo Pupin", Belgrade, Serbia

18.09.	Reinforcement Learning-Based Smart Temperature Control for Buffer Tanks in HVAC Systems	Dea Jelić <sup>1*</sup> ; Marko Jelic <sup>1</sup> ; Katarina Stankovic <sup>1</sup> ; Marko Batić <sup>1</sup> <i><sup>1</sup> Institute "Mihajlo Pupin", Belgrade, Serbia</i>
18.10.	Immersive Virtual Reality Simulator for Smart Grid Design, Operation, and Optimization	Nikola Petrovic <sup>1*</sup> ; Filip Đorđević <sup>1</sup> ; Vasilije Bursać <sup>1</sup> <i><sup>1</sup> Faculty of Technical Sciences, University of Novi Sad</i>
18.11.	Explainable AI for District Heating Systems: Improving Interpretability and Decision-Making	Valentina Nejković <sup>1*</sup> ; Lazar Vučković <sup>1</sup> <i><sup>1</sup> Faculty of Electronic Engineering, University of Niš, Serbia</i>

# Tuesday, March, 11<sup>th</sup>, 2025

## ICIST#9: Special track

### ICT for health, well-being and sport, Session 2

18:30-20:00, conference room „Pančić 2“

ID	Title	Authors
19.01.	Opportunities for AI Implementation in Pharma 4.0	Marija Branković <sup>1</sup> ; Tatjana Stojadinović <sup>1</sup> ; Ilija Antović <sup>2*</sup> <sup>1</sup> Medicines and Medical Devices Agency of Serbia <sup>2</sup> Faculty of Organizational Sciences, University of Belgrade
19.02.	A Blockchain-Based Software System for Automated Medical Record Exchange	Vladimir Jovanović <sup>1*</sup> ; Nikola Todorović <sup>1</sup> ; Miroslav Tomić <sup>1</sup> ; Milan Čeliković <sup>1</sup> ; Vladimir Dimitrieski <sup>1</sup> <sup>1</sup> Faculty of Technical Science, Novi Sad
19.03.	A Rule-Based System for Perioperative Cardiovascular Risk Assessment	Danica Gazdić <sup>1</sup> ; Anđela Trajković <sup>1*</sup> ; Siniša Nikolić <sup>1</sup> <sup>1</sup> University of Novi Sad, Faculty of Technical Sciences, Novi Sad
19.04.	Aquatic Haptic Interface for Biomechanical Feedback: System Design and Development	Matevž Hribernik <sup>1*</sup> ; Sašo Tomažič <sup>1</sup> ; Anton Kos <sup>1</sup> <sup>1</sup> University of Ljubljana, Faculty of Electrical Engineering
19.05.	Low-Latency Transmission of Inertial Sensor Data with Consumer-Grade Software-Defined Radio	Timotej Gruden <sup>1*</sup> <sup>1</sup> University of Ljubljana, Faculty of Electrical Engineering
19.06.	Potential applications of probability sampling techniques for measuring global trends in mental health disorders	Dragana Radojčić <sup>1*</sup> <sup>1</sup> Faculty of Economics and Business, University of Belgrade, Serbia
19.07.	Predicting Diabetes Using Machine Learning: A Cross-Platform Study Between Python and ML.NET	Anđelija Đorđević <sup>1*</sup> ; Aleksandar Milenković <sup>1</sup> ; Petar Rajković <sup>1</sup> ; Dragan Janković <sup>1</sup> <sup>1</sup> Faculty of Electronic Engineering, University of Niš