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49th ICT and Electronics Convention

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2026

HYBRID CONVENTION

AI & HPC FORUM

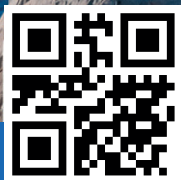


PROGRAM

MAY 25 - 29, 2026 OPATIJA, CROATIA
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- AI MULTILINGUAL CONVENTION
- OVER 450 PAPERS/EVENTS
- MIPRO ANNUAL AWARD

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Sva ICT rješenja, jedan partner.



ICT mrežna rješenja
i infrastruktura



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Fotonaponska
energetska rješenja



Odoo ERP i
razvoj aplikacija



Digitalizacija

STORM Grupa okuplja devet specijaliziranih tvrtki s jednim ciljem – isporuka sveobuhvatnih ICT rješenja i usluga na jednom mjestu.

U suradnji s vodećim svjetskim IT dobavljačima i primjenom najnovijih tehnoloških trendova, povezujemo infrastrukturu, sigurnost, softver i obnovljive izvore energije u snažan, pouzdan i skalabilan sustav. Tehnologiju, znanje i inovaciju pretvaramo u konkretna rješenja koja vam omogućuju fokus na ono što je zaista važno.

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From ICT Foundations to an Intelligent Economy



Academician Karolj Skala, PhD
*International Program
Committee General Chair*

After a decade of systematic development of strong information and communication technologies, Europe stands at a strategic crossroads: ICT is no longer just infrastructure for development, but a key instrument of economic strength, technological sovereignty, and geopolitical stability. We are entering a period in which data flows, autonomous systems, advanced digital infrastructures, and intelligent algorithms converge into systems capable of independent operation, resilience, and long-term competitiveness of the European economy.

The intelligence being developed today goes beyond the classical understanding of artificial intelligence. At the 49th MIPRO conference we introduce the concept of **Inorganic Intelligence** as the next development phase, an interdisciplinary and technologically deepened framework that integrates computational, linguistic, physical, biological, and networked systems into a coherent intelligent ecosystem.

Inorganic Intelligence represents a shift from fragmented solutions to systems that operate in real time, collaborate with humans and institutions, and empower the strategic autonomy of civilization in key technological domains.

In this context, the **Economic AI and HPC Forum** positions itself as the strategic hub of the 49th MIPRO. The Forum brings together industry, the technology sector, research and academic institutions, AI associations, and policymakers with the aim of accelerating the transition from experimental AI applications to systematic, industry-relevant, and regulation compliant transformation. Special emphasis is placed on building a regional and pan European AI symbiosis, strengthening the industrial base, and linking innovation with real economic impact.

A key role in this process is played by a new generation of digital infrastructure, **AI factories, AI antennas, and HPC infrastructure as supporting systems** which enable the development, validation, and scaling of Inorganic Intelligence solutions within the scientific value chain. These technological and infrastructural pillars become the foundation of an economy that is operationally sovereign, energy optimized, globally competitive, and capable of responding to the security and societal challenges of the future.

Alongside 17 scientific and professional conferences, the program features workshops, forums, seminars and an accompanying exhibition. As part of the opening ceremony, a panel dedicated to autonomous vehicles will also be held, reaffirming that the 49th MIPRO remains a place where development trends are not only followed, but actively shaped. As a hybrid and multilingual scientific communication platform, MIPRO enables participants from around the world to actively collaborate, exchange knowledge, and co-create solutions in real time, in accordance with the highest technological and ethical standards.

We invite scientists, engineers, entrepreneurs, students, and strategic decision-makers to contribute with their papers, initiatives, and participation to a platform that connects ICT foundations with an intelligent, resilient, and competitive economy.

Welcome to the 49th MIPRO 2026 in Opatija — the place where Europe builds its intelligent technological future.

Od ICT temelja do inteligentne ekonomije

Nakon desetljeća sustavnog razvoja snažnih informacijskih i komunikacijskih tehnologija, Europa se nalazi na strateškom raskrižju: ICT više nije samo infrastruktura razvoja, već ključni instrument ekonomske snage, tehnološke suverenosti i geopolitičke stabilnosti. Ulazimo u razdoblje u kojem se tokovi podataka, autonomni sustavi, napredne digitalne infrastrukture i inteligentni algoritmi spajaju u sustave sposobne za samostalno djelovanje, otpornost i dugoročnu konkurentnost europskog gospodarstva.



Inteligencija koja se danas razvija

nadilazi klasično razumijevanje umjetne inteligencije. Na 49. MIPRO skupu uvodimo koncept **anorganske inteligencije** kao sljedeće razvojne faze, interdisciplinarni i tehnološki produbljen okvir koji integrira računalne, lingvističke, fizičke, biološke i umrežene sustave u koherentan inteligentni ekosustav. Anorganska inteligencija predstavlja prijelaz s fragmentiranih rješenja na sustave koji djeluju u stvarnom vremenu, surađuju s ljudima i institucijama te osnažuju stratešku autonomiju civilizacije u ključnim tehnološkim područjima.

U tom kontekstu, **Gospodarski AI i HPC Forum** pozicionira se kao strateško središte 49. MIPRO-a. Forum okuplja industriju, tehnološki sektor, istraživačke i akademske institucije, AI udruge i donositelje odluka s ciljem ubrzanja prijelaza s eksperimentalnih AI primjena na sustavnu, industrijski relevantnu i regulatorno usklađenu transformaciju. Poseban naglasak stavlja se na izgradnju regionalne i paneuropske AI simbioze, jačanje industrijske baze te povezivanje inovacija s konkretnim gospodarskim učinkom.

Ključnu ulogu u tom procesu ima nova generacija digitalne infrastrukture - **AI tvornice, AI antene i HPC infrastruktura kao potporni sustavi**, koji omogućuju razvoj, validaciju i skaliranje rješenja anorganske inteligencije unutar znanstvenog vrijednosnog lanca. Ti tehnološki i infrastrukturni stupovi postaju temelji gospodarstva koje je operativno suvereno, energetski optimizirano, globalno konkurentno i sposobno odgovoriti na sigurnosne i društvene izazove budućnosti.

Uz 17 znanstveno-stručnih savjetovanja, program skupa dodatno će obogatiti radionice, forumi, seminari i popratna izložba, dok će u sklopu svečanog otvorenja biti održan i okrugli stol posvećen autonomnim vozilima, potvrđujući kako 49. MIPRO ostaje mjesto na kojem se razvojni smjerovi ne samo prate, već aktivno oblikuju. Kao hibridna i višejezična platforma znanstvene komunikacije, MIPRO omogućuje sudionicima iz cijelog svijeta širu aktivnu suradnju, razmjenu znanja i zajedničko stvaranje rješenja u stvarnom vremenu, u skladu s najvišim tehnološkim i etičkim standardima.

Pozivamo znanstvenike, inženjere, poduzetnike, studente i donositelje strateških odluka da svojim radovima, inicijativama i sudjelovanjem doprinesu platformi koja povezuje ICT temelje s inteligentnim, otpornim i konkurentnim gospodarstvom.

Dobrodošli na 49. MIPRO 2026 u Opatiji — mjesto gdje Europa gradi svoju inteligentnu tehnološku budućnost

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HCI Human-Computer Interaction	47	SSE Software and Systems Engineering	56
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MEET Microelectronics, Electronics and Electronic Technology	50		
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08

EXHIBITION IZLOŽBA

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PHYSICAL EVENT
FIZIČKI DOGAĐAJ



HYBRID EVENT
HIBRIDNI DOGAĐAJ

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TIMETABLE

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WORKING TIME · RADNO VRIJEME

DATE DATUM	RECEPTION PRIJEMNI URED	EXHIBITION IZLOŽBA
25.05.2026., Monday · ponedjeljak	08 ⁰⁰ – 19 ⁰⁰	–
26.05.2026., Tuesday · utorak	08 ⁰⁰ – 19 ⁰⁰	10 ⁰⁰ – 19 ⁰⁰
27.05.2026., Wednesday · srijeda	08 ³⁰ – 19 ³⁰	09 ⁰⁰ – 19 ⁰⁰
28.05.2026., Thursday · četvrtak	07 ⁴⁵ – 19 ⁰⁰	09 ⁰⁰ – 19 ⁰⁰
29.05.2026., Friday · petak	08 ⁰⁰ – 17 ⁰⁰	09 ⁰⁰ – 13 ⁰⁰

The detailed schedule for all MIPRO 2026 events will be placed on bulletin boards and at www.mipro.hr. All registered participants have free access to plenaries and exhibition with obligatory badge carrying. Mikrosatnica svih događanja na MIPRO 2026 bit će istaknuta na oglasnim pločama i na www.mipro.hr. Svim registriranim sudionicima slobodan je pristup plenarnom radu i izložbi i programsko-stručnim prezentacijama uz obavezno nošenje bedževa.

TERMS · ROKOVI

- until / do 15.05.2026. Hotel reservation · **Rezervacija hotela**
- until / do 15.05.2026. Early bird registration and fee payment
Rana prijava i uplata kotizacije
- 25.05.2026. Delivery of equipment/exhibits and booth setup
Doprema izložbenih ekspanata i postavljanje izložbi
- 26.05.2026. Opening of the exhibition at 10⁰⁰ AM
Početak rada u 10⁰⁰ sati
- 29.05.2026. End of the exhibition at 1⁰⁰ PM
Završetak rada u 13⁰⁰ sati i otprema ekspanata

HOTEL RESERVATION · REZERVACIJA HOTELA

Please arrange your accommodation in time, no later than May 15th, 2026.
Molimo Vas da rezervirate hotel što prije, najkasnije do 15.05.2026.



For all information please contact: **Reservation office in Grand Hotel Adriatic d.d. Opatija**, phone +385 (0)51 719 010, fax +385 (0)51 719 015 or e-mail: info@hotel-adriatic.hr. Parking ticket is EUR 20,00 per day.

Za sve potrebne informacije obratite se na **Rezervacijski ured Grand hotela Adriatic d.d. Opatija**, tel. +385 (0)51 719 010, fax +385 (0)51 719 015 ili e-mail info@hotel-adriatic.hr. Dnevna parkirališna karta iznosi 20,00 EUR.



Accommodation booking in Hotel Admiral and Hotel Istra is made exclusively through the web portal www.liburnia.hr with the obligatory entry of the reservation code **MIPRO26**. In case of difficulties with booking, please contact the **Liburnia Hotels**

& Villas Reservation Center at tel. +385 (0) 51 710 444 or e-mail reservation.mice@liburnia.hr.

Rezervacija smještaja u Hotelu Admiral i Hotelu Istra vrši se isključivo putem web portala www.liburnia.hr uz obavezan upis rezervacijskog koda **MIPRO26**. U slučaju poteškoća prilikom rezervacije, molimo kontaktirajte **Rezervacijski centar Liburnia Hotels & Villas** na tel. +385 (0)51 710 444 ili e-mail reservation.mice@liburnia.hr.



Booking can be made over the following QRcodes
QR kodovi za rezervaciju smještaja

HOTELS HOTELI	BED & BREAKFAST NOĆENJE S DORUČKOM		
	1/1	1/2	2/2
ADRIATIC I ****	130	130	190
ADRIATIC II ***	110	110	146
ADMIRAL ****	136	136	186
ISTRA ***	109	109	142

All prices are in EUR. The daily tax is EUR 2,20 per person per day and it isn't included in the above prices.

Sve cijene su izražene u EUR. Boravišna pristojba nije uključena u cijenu i iznosi 2,20 EUR po osobi dnevno.

PROGRAM FOR ACCOMPANYING PERSONS

For accompanying persons we propose some of the many programmes offered by the tourist agencies of Opatija. For more information, please ask at Grand Hotel Adriatic Opatija (www.hotel-adriatic.hr) or send an e-mail to the address info@hotel-adriatic.hr. Shorter and longer excursions are offered to the nearby City of Rijeka, the picturesque Istrian Peninsula with a string of charming medieval small towns, the world-renown Brioni islands, the mountainous region of Gorski Kotar, or a bit further Venice with its lagoons. In any case, see the sights of Opatija, visit her beautiful parks, one of the oldest seafront promenades on the Mediterranean which links the settlements of Volosko, Ičići, Ika and Lovran with Opatija, the Croatian Museum of Tourism, numerous restaurants and Viennese cafes with a first-class offer.

Last but not least, experience Kvarner Bay and Opatija by taking a pleasant boat trip from Opatija's harbour or visit Učka Nature Park with magnificent views from the peek Vojak (1400m).

REGISTRATION FEES · KOTIZACIJE

EVENTS DOGAĐAJI	PRICES IN EUR · CIJENA U EUR FEES · KOTIZACIJE	
	up to / do 15.5.2026.	from / od 16.5.2026.
HEP	370	400
IRP-ZT	330	360
AIS	330	360
BIS-BDP	330	360
CE	330	360
CIS	330	360
CTI	330	360
DC-CPS	330	360
DE-DS	330	360
DS-BE	330	360
EE	330	360
HCI	330	360
ICTLAW	330	360
MEET	330	360
OPEL	330	360
PM	330	360
SIDE	330	360
SSE	330	360
SP – MIPRO Junior	165	180
CCE	165	165
CRO-IGF, NEST4WB, SLAIF, MULTI-STEM	Free access · Slobodan pristup	

'All fees include Croatian VAT. Sve cijene kotizacija uključuju PDV.

All visitors have free access to the formal opening, plenary session, forum and exhibition. [Svim posjetiteljima slobodan je pristup svečanom otvaranju, plenarnom radu, forumu i izložbi.](#) Members of MIPRO or IEEE have a 10% fee discount. The unique fee for students (undergraduate and graduate) primary and secondary school teachers is 165 EUR (without any additional discount). **Discount doesn't apply to PhD students.** There will be a 10% discount for the registration fee to those participants who are attending more than one tutorial or conference. [Članovi MIPRO i IEEE imaju popust od 10%. Preddiplomski i diplomski studenti te nastavnici osnovnih i srednjih škola plaćaju jedinstvenu kotizaciju od 165 EUR bez prava na dodatni popust. Popust se ne odnosi na studente doktorskog studija.](#) Sudionicima koji sudjeluju na više seminara ili savjetovanja, ukupna kotizacija umanjuje se za 10%.

EVENTS DOGAĐAJI	PRICES IN EUR · CIJENA U EUR		
	Regular	CroAI and MIPRO members	IEEE members
STEP AI FORUM	200	160	180

* All fees include Croatian VAT. *Sve cijene kotizacija uključuju PDV.*

We recommend registering by **May 15** to ensure timely processing and efficient event organization. Preporučujemo registraciju do **15. svibnja** kako bismo osigurali pravovremenu obradu i učinkovitu organizaciju događaja.

REGISTRATION · PRIJAVA

Conference fee payment can be done after the registration is processed. Registration can be made online at www.mipro.hr or via e-mail mipro@mipro.hr.

The fee is payable in EUR to the following IBAN of **MIPRO Croatian Society** (MIPRO, Jadranski trg 1/II, HR-51000 Rijeka, Croatia):
HR9824020061100139672
at Erste & Steiermärkische Bank d.d., Jadranski trg 3a, HR-51000 Rijeka, Croatia (SWIFT: ESBCHR22), with the name of the person registered.

Note that bank charges are at the expense of the debtor.

The fee includes:

- MIPRO 2026 Proceedings on digital medium
- Conference material
- Official opening program (plenary session) with a cocktail party on Wednesday evening, May 27th, 2026

Kotizacija se obračunava na temelju Prijave za MIPRO 2026. Prijava se vrši on-line preko portala www.mipro.hr ili putem e-maila mipro@mipro.hr.

Kotizacija se uplaćuje na IBAN MIPRO-a **HR9824020061100139672** kod Erste & Steiermärkische Bank d.d. Rijeka s naznakom "ime i prezime osobe za koju se uplaćuje + kratica odabranog događaja".

Uplate se, kao i prijave, rade za svaku osobu pojedinačno. Molimo vas da nam e-mailom dostavite kopiju o obavljenoj uplati.

Kotizacija uključuje:

- zbornik radova skupa MIPRO 2026 na digitalnom mediju
- konferencijski materijal
- svečani program (plenarni rad) s koktelom u srijedu navečer 27.05.2026.

VAŽNO!

Sudionici plenarnih tema, okruglog stola, radionica i pratećih aktivnosti, koji nisu registrirani putem seminara ili savjetovanja, obavezni su se po dolasku registrirati na Prijemnom uredu MIPRO, gdje će dobiti bedževe i sve potrebne informacije. Nošenje bedževa je obavezno u svim prostorima odvijanja aktivnosti MIPRO-a. Osobe bez bedževa nemaju pravo pristupa niti jednom događaju..

MIPRO 2026 certificate of attendance is being issued upon request.
MIPRO izdaje potvrde obveznicima stručnog usavršavanja na njihov zahtjev.

02. GENERAL EVENTS

ZAJEDNIČKI DOGAĐAJI ZA SVE SUDIONIKE



FORMAL OPENING · SVEČANO OTVARANJE

(Formal Opening and Plenary session will be simultaneously translated - supported by **Telemach**)

EN

HR

27.05.26. 10⁰⁰-13⁰⁰ Congress Hall · Kongresna dvorana, Grand Hotel Adriatic

Event manager · **Voditeljica:** Iva Šulentić

Technical support · **Tehnička podrška:** Tibor Bün, Zorislav Šojat & Mario Konecki

Opening Addresses of Sponsors, Patrons and Guests

Pozdravne riječi sponzora, pokrovitelja i gostiju

**MIPRO Annual ICT Award “Tesla’s Beacon of Knowledge” Ceremony
Dodjela MIPRO godišnje ICT nagrade „Teslina luč znanja”**

PLENARY LECTURE · PLENARNO PREDAVANJE

John M. Martinis (The University of California, Santa Barbara, United States)

PANEL · OKRUGLI STOL

**Autonomous Vehicles in the EU: Technology Is Ready
— Is the Regulatory and Safety Framework Keeping Up?**

**Autonomna vozila u EU: tehnologija je spremna
— je li pravni i sigurnosni okvir?**

Moderator and Contact: Melita Milenković, mmilenkovic@fpz.hr (Faculty of Transport and Traffic Sciences, Zagreb, Croatia)

Panelists · Panelisti: Vjekoslav Majetić (Dok-Ing, Zagreb, Croatia), Lovro Nobilo (Verne, Zagreb, Croatia), Ivan Petrović (Faculty of Electrical Engineering and Computing, Zagreb, Croatia), Damir Kljajić (Ericsson Nikola Tesla, Zagreb, Croatia), Representative of Ministry of Justice, Public Administration and Digital Transformation

About the Panel · O okruglom stolu:

The discussion will address key technological and legal challenges of autonomous vehicles, focusing on safety architecture, AI system validation, communication infrastructure (V2X), as well as liability issues and the regulatory framework at the Croatian and EU levels. **Rasprava će obuhvatiti ključne tehnološke i pravne izazove razvoja autonomnih vozila, s naglaskom na sigurnosnu arhitekturu, validaciju AI sustava, komunikacijsku infrastrukturu (V2X) te pitanja odgovornosti i regulatornog okvira u Republici Hrvatskoj i Europskoj uniji.**

**COCKTAIL
FOR PARTICIPANTS
AND GUESTS**

**KOKTEL
ZA SUDIONIKE, GOSTE
I UZVANIKE**

27.05.26. 20⁰⁰-22⁰⁰

Hall · Dvorana Fortuna Grand Hotel Adriatic

Welcome to 49th
MIPRO
COCKTAIL PARTY

MIPRO Annual ICT Award "Tesla's Beacon of Knowledge"

MIPRO godišnja ICT nagrada „Teslina luč znanja“

MIPRO proudly presents the MIPRO Annual ICT Award "Tesla's Beacon of Knowledge". This prestigious award is inspired by the legacy of Nikola Tesla, a pioneer whose innovations have shaped the modern era. "Tesla's Beacon of Knowledge", a symbol of creativity and inexhaustible human imagination, perfectly reflects the spirit of our award.

Each year, this award will be bestowed upon individuals and legal entities whose innovations have advanced the world of information and communication technologies, paving new paths and laying the groundwork for future generations. This award is not only a recognition of outstanding technological contributions but also a tribute to the creativity and courage that drive the ICT sector forward.

Together, we celebrate the bravery, innovation, and visionary spirit that shape our digital world. We thank all the creators whose work has shown that the limits of possibility are just the beginning of a new, unexplored reality.

MIPRO s ponosom predstavlja MIPRO godišnju ICT nagradu „**Teslina luč znanja**“. Ova prestižna nagrada inspirirana je naslijeđem Nikole Tesle, pionira koji je svojim inovacijama oblikovao moderno doba. „**Teslina luč znanja**“, simbol stvaralaštva i neiscrpane ljudske mašte, savršeno odražava duh naše nagrade.

Svake godine, ova nagrada će se dodijeliti pojedincima i pravnim osobama čije su inovacije unaprijedile svijet informacijsko-komunikacijskih tehnologija, otvarajući nove puteve i postavljajući temelje za buduće generacije. Ova nagrada nije samo priznanje za izvanredne tehnološke doprinose, već i odavanje počasti kreativnosti i odvažnosti koje ICT sektor pokreću naprijed. Zajedno slavimo hrabrost, inovativnost i vizionarski duh koji oblikuju naš digitalni svijet.

Zahvaljujemo svim stvaraocima koji su svojim radom pokazali da su granice mogućeg samo početak nove, neistražene stvarnosti.



Congratulations to this year's winners · Čestitamo ovogodišnjim dobitnicima

CATEGORY - KATEGORIJA

ACADEMY
AKADEMIJA



Nobel Laureate John M. Martinis for a pioneering approach and key contribution to quantum computing

Nobelovac John M. Martinis za pionirski pristup i ključan doprinos kvantnom računarstvu

CATEGORY - KATEGORIJA

ECONOMICS
GOSPODARSTVO



Infobip for innovations in communication technologies and digital business transformation in various industries

Infobip za inovacije u komunikacijskim tehnologijama i digitalnu transformaciju poslovanja u različitim industrijama

03. FORUMS FORUMI



CRO-IGF

HRVATSKI FORUM O UPRAVLJANJU INTERNETOM

HR

27.05.26. 16⁰⁰-19⁰⁰

Hall · Dvorana Camelia 2, Grand Hotel Adriatic

ORGANIZING COMMITTEE · ORGANIZACIJSKI ODBOR

Adrian Ježina (Telemach, Zagreb), Hrvoje Hadžić (Ericsson Nikola Tesla, Zagreb), Branimir Rajtar (NOG.hr, Zagreb), Krešo Antonović (Ministarstvo mora, prometa i infrastrukture), Tihomir Lulić (Ministarstvo vanjskih i europskih poslova), Marin Ante Pivčević (Ministarstvo pravosuđa, uprave i digitalne transformacije), Marin Vuković (Fakultet elektrotehnike i računarstva, Zagreb), Tihomir Katulić (Pravni fakultet, Zagreb), Kristijan Zimmer (HrOpen, Zagreb), Ivan Čaleta (Centar za sigurniji internet/Centar za nestalu i zlostavljanu djecu), Mislav Hebel, Zdravko Jukić (HAKOM), Nataša Glavor (SPAN), Ivana Jelačić (CARNET)

CHAIR AND CONTACT · VODITELJ I KONTAKT OSOBA

Ivana Jelačić, ivana.jelacic@carnet.hr (CARNET, Zagreb)

ABOUT THE FORUM · O FORUMU

IGF je forum otvorenog tipa, bez obvezujućih zaključaka. Okuplja predstavnike četiri tipična dionika internetskog eko-sustava: industrije/privatnog sektora, akademske zajednice, javne uprave i civilnog društva, a bavi se svim pitanjima vezanim uz upravljanje i funkcioniranje interneta. Nacionalni IGF je dio sustava foruma koji djeluju u sustavu UN-a, a više informacija oko ustanovljenja, misije i pravila IGF-a možete vidjeti na poveznici <https://www.intgovforum.org/en>.

THEMATIC FRAMEWORK · TEMATSKI OKVIR

U svijetu u kojem digitalne tehnologije oblikuju svaki aspekt naših života, pitanje upravljanja internetom je ključno za očuvanje transparentnosti, sigurnosti i prava svih osoba. Ovogodišnje deveto izdanje CRO IGF-a fokusirat će se na sljedeće tematske cjeline:

Svemir bez granica, ali ne bez pravila

Svemirski sektor je postao dinamično tržište i strateški interes svake države. Propisi često ne prate brzinu tehnološkog razvoja. Svemir je otvoren za poslovanje, ali znate li koja su pravila igre? Razgovarat ćemo o preprekama i odgovornostima. Stručnjaci će izlagati svoja stajališta o ravnoteži između ekonomskog rasta industrije i očuvanja sigurnosti u orbiti. Otkrite kakva nas budućnost čeka među zvijezdama.

Akt o digitalnim mrežama: Ključne promjene i implikacije za tržište (Digital Network Act - DNA)

DNA predstavlja nastojanje Europske unije za ubrzanjem razvoja naprednih digitalnih mreža, jačanjem jedinstvenog tržišta i povećanjem otpornosti infrastrukture u sve zahtjevnijem tehnološkom i geopolitičkom okruženju. DNA ima za cilj pripremiti Europsku uniju za buduće pouzdane i otporne digitalne mreže. Saznajte ključne informacije o primjeni i značaju DNA-a. Hrvatski IGF pokrenut je 2015. godine. Više informacija s prethodnih CRO-IGF događaja moguće je pronaći na poveznici <https://www.carnet.hr/en/projekt/internet-governance-forum/> i <https://www.linkedin.com/company/croatian-internet-governance-forum/>.

The forum will be held in Croatian.

SLOBODAN PRISTUP

27.05.26. 15⁰⁰-19⁰⁰

Congress Hall · Kongresna dvorana Grand Hotel Adriatic

ORGANIZERS

MIPRO and CroAI

ABOUT THE FORUM

The Forum aims to present the EU's strategic frameworks, as well as the technological and infrastructural environments for the development of a smart industry powered by AI and HPC encompassing both large enterprises and SMEs.

MODERATOR

Iva Šulentić (Hrvatska radiotelevizija, Zagreb)

OBJECTIVES

- position AI as a strategic economic ecosystem,
- frame AI as a driver of sovereignty and competitiveness,
- introduce the concept of Anorganic Intelligence beyond narrow AI,
- Europe's AI ambition within the Digital Decade 2030,
- strategic autonomy, resilience, and economic security,
- transition from innovation policy to industrial AI policy,
- supporting the "new industrial stack" through a robust financial ecosystem.

OPENING PRESENTATION

- Zorislav Šojat, Karolj Skala (Ruđer Bošković Institute, Zagreb)
From Artificial to Anorganic Intelligence

PLENARY PRESENTATION

1. Andrea Čović Vidović (European Commission, Brussels, Belgium)
From AI Policy to Economic Reality
2. Anders Dam Jensen (EuroHPC Joint Undertaking, Luxembourg)
Networking & Institutional Exchange
3. Dominic Gorecky (Swiss Smart Factory, Biel/Bienne, Switzerland)
From Industry 4.0 to Industry 5.0: How AI is Reshaping Automation – Implications for SMEs
4. Slavko Vidović (InfoDom, Zagreb)
AI Application Development Framework: Multiagent Systems
5. Nina Begičević Ređep, Neven Vrček (Faculty of Organization and Informatics, Varaždin)
Pre-incubation and Skill Development for the Smart Industry Era
6. Damir Prusac (Infobip, Zagreb)
Industrial AI at Scale: From Connectivity to Intelligent Infrastructure
7. Damir Kopljar (CROZ, Zagreb)
Solving Complex Problems Using Data and Machine Learning
8. Aleks Buvač (Own.Solutions, Rijeka)
Tools, Platforms, and Methodologies for AI Application Development
9. Pantheon Data Center Presentation
**Presentation of the Pantheon AI Hyperscale Tier IV Data Center
- A New Phase in Europe's Digital Transformation and AI Ecosystem Development**

ORAL AND POSTER PRESENTATION

European AI & HPC Ecosystems and Cross-Border Value Chains

- coordinated HPC and AI ecosystems across Europe
- sectoral value chains: manufacturing, healthcare, energy, mobility, finance
- SMEs and scale-ups as AI multipliers
- identification of ecosystem gaps
- best practices in cross-border AI collaboration
- frameworks for interoperability

The forum will be held in English. The forum will be simultaneously translated.

04. WORKSHOP RADIONICA



CCE

USPOREDNO INŽENJERSTVO – KAKO POBIJEDITI U TRŽIŠNOJ UTRCI POMOĆU
MODERNIH ELEKTRONIČKIH PROGRAMSKIH ALATA CAE/CAD/CAM

HR

25.05.26. 10⁰⁰-13³⁰, 14⁰⁰-17⁰⁰

26.05.26. 10⁰⁰-13⁰⁰, 14⁰⁰-17⁰⁰

Hall · Dvorana Bellavista, Grand Hotel Adriatic

ORGANIZERS · ORGANIZATORI

MIPRO i Computer Controls

CONTACT · KONTAKT OSOBA

Robert Brekalo, robert.brekalo@ccontrols.hr (Computer Controls, Zagreb)

CHAIRS · VODITELJI

Robert Brekalo, Matija Marković (Computer Controls, Zagreb)

ABOUT THE WORKSHOP · O RADIONICI

Na radionici će biti predstavljeni novi trendovi s područja projektiranja i proizvodnje u elektronici. Bit će prikazana svojstva i mogućnosti najnovijih programskih alata za profesionalno elektroničko projektiranje.

Prezentacije i seminarske vježbe održat će se na PC računalima za sljedeće proizvode:

- Altium Designer – popularni programski paket za projektiranje u elektronici: SCHEMATIC, SPICE SIMULATOR, PCB, SIGNAL INTEGRITY, SITUS TOPOLOGICAL AUTOROUTER, CAMTASTIC,
- KEIL/ARM – C/C++ /EC++ kompileri za niz DSP-a, 8-, 16-, i 32-bitnih procesora/kontrolera, alati za debugiranje, integracija sa RTOS i TCP/IP rješenjima...
- Silicon Labs, Silergy, Alliance... - nova tehnološka dostignuća vodećih svjetskih proizvođača integriranih elektroničkih komponentata.

Predavanja će popratiti praktičan rad na računalima, gdje će polaznici biti vođeni stručnjacima za specifična područja i to:

- hijerarhijsko projektiranje i izrada električne sheme,
- analiza oblika signala – analogno-digitalna simulacija,
- automatsko postavljanje i povezivanje elektroničkih veza,
- optimizacija električnih veza,
- priprema za proizvodnju tiskanih pločica,
- EMC analiza (integritet signala, refleksija, preslušavanje),
- pravila za optimalno analogno projektiranje,
- izrada potrebne dokumentacije,
- primjena elektroničkih komponentata visoke integracije.

TARGET AUDIENCE · CILJANA PUBLIKA

Radionica je namijenjena svima koji žele unaprijediti svoje znanje, upoznati mogućnosti najnovijih vrhunskih programskih paketa, te dobiti kvalitetnu edukaciju, što će im omogućiti brži i uspješniji budući rad.

EQUIPMENT · OPREMA

Sva predavanja i vježbe izvode se na PC računalima.

MATERIALS · MATERIJALI

Zbornik, tiskane materijale i CD-e s primjerima izradit će Computer Controls i dobit će ih polaznici seminara.

The workshop will be held in Croatian.

05. LIFELONG EDUCATION – TUTORIALS

CJELOŽIVOTNO OBRAZOVANJE – SEMINARI



HEP

INFORMATION AND COMMUNICATION TECHNOLOGY IN THE ELECTRIC POWER SECTOR
INFORMACIJSKA I KOMUNIKACIJSKA TEHNOLOGIJA U ELEKTROPRIVREDNOJ DJELATNOSTI

HR

26.05.26. 10⁰⁰-12³⁰, 13³⁰-15³⁰

Hall · Dvorana Camelia 2, Grand Hotel Adriatic

CHAIRS · VODITELJI

Vitomir Komen, vitomir.komen@riteh.uniri.hr (Rijeka), **Ivan Periša** (HEP-ODS d.o.o., Zagreb),
Renato Čučić (HEP-ODS d.o.o., Zagreb)

THEMATIC FRAMEWORK · TEMATSKI OKVIR

- napredne tehnologije, spremnici energije, mikromreže, fleksibilna trošila, energetska
- učinkovitost
- informacijska integracija elektroprivredne organizacije
- informacijska i komunikacijska tehnologija (ICT) u vođenju elektroenergetskog sustava
- IP tehnologija i informacijski sustavi u elektroprivredi
- komunikacije u sustavima upravljanja
- nova rješenja i standardi za SCADA, EMS, DTS i DMS programske sustave
- sekundarni sustavi u elektroenergetskim objektima
- sigurnost sustava procesne informatike
- sustavi namijenjeni vođenju tržišta električne energije

PRELIMINARY PROGRAM · PRELIMINARNI PROGRAM

10:00-12:30 Vladimir Valentić (Tehnički fakultet, Rijeka)

Jačanje otpornosti elektroenergetskog sustava u uvjetima rastuće nesigurnosti

Tomislav Capuder (Fakultet elektrotehnike i računarstva, Zagreb)

Podatci u naprednim distribucijskim mrežama

Danijel Topić (Fakultet elektrotehnike, računarstva i informacijskih tehnologija Osijek)

Baterijski spremnici energije u elektroenergetskom sustavu

Berislav Korpar, Tea Grizelj (Schneider Electric, Zagreb)

Mikromreže - ključan element suvremenog energetskog sustava

Nika Martinović (Končar Digital, Zagreb)

PowerCIM - CIM bazirano upravljanje mrežnim modelom za interoperabilnost, kvalitetu podataka i kontroliranu razmjenu (GIS/DMS/SCADA/EMS/analitika)

12:30-13:30 Pauza

13:30-15:30 Hrvoje Keko (Argovolt, Banjol)

Otvoreni standardi, otvoreni podaci i alati otvorenog koda kao stupovi moderne energetike

Marko Gojić, Dora Šegović (Comping, Zagreb)

Platforma za unaprjeđenje osmotrivosti distribucijske mreže i povećanje energetske učinkovitosti sustava primjenom near real-time mjerenja

Dominik Maričević (Nano Energies Hrvatska, Zagreb)

Digitalna okosnica agregacije fleksibilnosti: komunikacijska arhitektura i upravljanje distribuiranim kapacitetima u realnom vremenu

Amalija Božiček (Adnet, Zagreb)

Data Centric Solutions/Podaci kao temelj rješenja

The tutorial will be held in Croatian.

**IRP-ZT****GREEN TRANSITION OF THE POWER SYSTEM – R&D PROJECTS**
ZELENA TRANZICIJA ELEKTROENERGETSKOG SUSTAVA - ISTRAŽIVAČKO RAZVOJNI PROJEKTI

HR

25.05.26. 09⁰⁰-12⁰⁰, 14⁰⁰-17⁰⁰**Hall · Dvorana Camelia 2, Grand Hotel Adriatic****CHAIRS · VODITELJI**

Dubravko Sabolić, dubravko.sabolic@hops.hr (HOPS d.d., Zagreb), **Hrvoje Pandžić**, hrvoje.pandzic@fer.hr (Fakultet elektrotehnike i računarstva, Zagreb), **Antun Andrić**, antun.andric@hops.hr (HOPS d.d., Zagreb)

ABOUT THE TUTORIAL · O SEMINARU

Seminar je namijenjen prvenstveno polaznicima iz poduzeća i ustanova zahvaćenih procesima deregulacije sektora elektroenergetike, odnosno zelene tranzicije energetskog sektora. Zelena tranzicija energetskog sustava uzrokuje rapidno ozelenjivanje proizvodnog dijela elektroenergetskog sustava te opću elektrifikaciju prometnog i ostalih industrijskih sektora. Na djelu je ubrzana integracija europskih tržišta energije, što podrazumijeva i upravljanje zagušenjima te uravnoteženje sustava, sve s ciljem ubrzavanja tranzicije te efikasnijeg korištenja resursa. S druge strane, težnje ka ostvarenju sustava s distribuiranom proizvodnjom i, posljedično, uvođenje novih sudionika na tržištima električne energije, gdje praktički svako kućanstvo može postati aktivnim sudionikom tržišta, stavlja sve sudionike u zelenoj tranziciji, pa tako i operatore sustava, pred velike izazove u razdoblju koje je pred nama. Operatori sustava, akademska zajednica i industrijski partneri pripremaju se za izazove budućnosti kroz razne istraživačko-razvojne projekte. Na ovom seminaru prezentirat će se projekti iz okvira Horizon 2020, Digital, HRZZ i CEF:

- Napredna virtualna elektrana (aVPP) - U kontekstu agregacije distribuiranih resursa projektno rješenje će osigurati jednostavnu integraciju nekoliko stotina ili tisuća distribuiranih energetskih resursa u agregatorski portfelj koji će potom funkcionirati kao jedinstvena elektrana. Ova integracija će se odvijati na način da će kao dio predložene platforme u svaki distribuirani izvor koji se želi priključiti platformi biti instaliran tzv. rubni pristupni uređaj (engl. edge gateway) koji će korištenjem standardnih industrijskih komunikacijskih protokola (IEC 61850, IEC 60870-5-104, Modbus TCP, S7, OPC UA) osigurati komunikaciju s uređajima na razini elektroenergetskog postrojenja. Rješenje koje će biti rezultat provedbe aVPP projekta je platforma napredne virtualne elektrane koja predstavlja značajno unapređenje trenutno dostupnih rješenja na tržištu.
- WISE (Wind Turbine Lightning Safety Evaluation) – Projekt se bavi sustavnim istraživanjem interakcije munja s visokim objektima i vjetroagregatima, s posebnim naglaskom na sigurnosnu evaluaciju vjetroagregata izloženih atmosferskim pražnjenjima. Projekt se provodi u suradnji partnera iz Švicarske, Hrvatske i Poljske, a jedan od glavnih ciljeva je uspostava jedinstvenog multimodalnog opservatorija za mjerenje munja na vjetroelektrani u Europi, smještenog u Hrvatskoj, u području izražene zimske aktivnosti munja. Mjerni koncept uključuje sinkronizirana mjerenja struje munje, optička opažanja pomoću brzih kamera, podatke zemaljskog sustava za lociranje munja i podatke satelitskog sustava za promatranje munja temeljenog na optičkoj tehnologiji.
- ECLIPSE – Projekt je financiran iz okvira Digital Europe Programme (DEP), s ciljem razvoja aplikacije za razmjenu informacija prema korisnicima mreže i tržišnim sudionicima te poticanje koordiniranog odziva potrošnje za raznovrsne namjene i poticanje upravljanja potrošnjom od strane operatora sustava, s ciljem povećanja fleksibilnosti za operatora volumena i ostvarivanja ušteda.
- SynGRID - Creating synergies on the topic of low-voltage grid management – Projekt je usmjeren na povećanje upravljivosti i osmotrivosti niskonaponskih mreža s kontinuiranim rastom udjela OIE. Kroz projekt se razvija velik broj naprednih matematičkih modela te simulacijskih alata temeljenih na optimizacijskim i algoritmima strojnog učenja kojima će se operatoru distribucijskog sustava olakšati donošenje odluka pri planiranju i vođenju distribucijskih mreža. Teme koje se proučavaju

kroz projekt SynGRID su fleksibilnost krajnjih korisnika, novi tržišni koncepti kao što su agregatori i energetske zajednice, digitalni blizanci niskonaponskih mreža i sl.

- GreenSwitch u okviru Connecting Europe Facility (CEF) okvira – projekt energetske tranzicije usmjeren na razvoj pametnijih, fleksibilnijih i održivih elektroenergetskih sustava. Projekt integrira obnovljive izvore energije, napredne digitalne alate i tržišne mehanizme kako bi optimizirao proizvodnju, potrošnju i uravnoteženje električne energije. Posebno se bavi aktivnostima poput upravljanja zagušenjima. Kroz suradnju operatora prijenosnog i distribucijskog sustava te tržišnih sudionika, GreenSwitch doprinosi povećanju pouzdanosti sustava, smanjenju emisija CO₂ i ubrzanju prelaska na dekarbonizirani energetske sektor.
- HEDGE-IoT (Holistic Edge Computing Framework for Empowering the IoT Edge Intelligence) razvija operativna digitalna rješenja temeljena na IoT platformama i razmjeni podataka u stvarnom vremenu. Fokus je na integraciji distribuiranih asseta naprednoj analitici i primjeni AI za optimizaciju rada mreže i tržišnih procesa kroz nekoliko pilot-implementacije adresira interoperabilnost sustava (TSO-DSO), standardiziranu razmjenu podataka i podršku za tržišne mehanizme (fleksibilnost, uravnoteženje).

PRELIMINARY PROGRAM · PRELIMINARNI PROGRAM

09:00-12:00 Mateo Beus (Sveučilište u Zagrebu Fakultet elektrotehnike i računarstva, Zagreb)

Projekt aVPP

Franjo Vuković (Sveučilište u Zagrebu Fakultet elektrotehnike i računarstva, Zagreb)

Projekt WISE

Kristina Pandžić (Hrvatski operator prijenosnog sustava, Zagreb)

Projekt ECLIPSE

Lovro Lukač (Sveučilište u Zagrebu Fakultet elektrotehnike i računarstva, Zagreb)

Projekt SynGRID

Filip Grebenar (Hrvatski operator prijenosnog sustava, Zagreb)

Projekt GreenSwitch

Leila Luttenberger Marić (Končar Digital, Zagreb)

Projekt HEDGE IoT

12:00-14:00 Pauza za ručak

14:00-17:00 Ivan Ubrekić, Petra Bradarić (Hrvatski operator prijenosnog sustava, Zagreb)

Novosti na tržištu električne energije, trendovi, razvoj u narednom razdoblju, CBAM. Razvoj tržišta usluga uravnoteženja, platforma za uravnoteženje, potencijali daljnjeg razvoja.

Dominik Maričević (Nano Energies Hrvatska, Zagreb)

Kako zaraditi više od portfelja OIE/baterijskih spremnika?

Kako vrednovati fleksibilnost korisnika mreže? Napredni načini korištenja fleksibilnosti – EU iskustva

Željko Šmitran (IE Energy, Rijeka)

Iskustva s prvim baterijskim spremnikom priključenim na prijenosnu mrežu. Koji su poslovni modeli vezano na tržišta električne energije?

Josip Tošić (Toska, Zagreb)

Od priključenja do tržišta: digitalna transformacija elektroenergetskog sustava na primjerima OIE projekata

Tin Bobetko, Zlatko Ofak (Uprise, Zagreb)

Trendovi i iskustva digitalizacije u zelenoj tranziciji na primjerima iz prakse.

STORM – sustav za optimalno upravljanje energetske portfeljem s integriranim baterijskim sustavom na tržištu električne energije

Hrvoje Pandžić (Fakultet elektrotehnike i računarstva, Zagreb), Dominik

Maričević (Nano Energies Hrvatska, Zagreb), Željko Šmitran (IE Energy,

Rijeka), Josip Tošić (Toska, Zagreb), Antun Andrić (Hrvatski operator

prijenosnog sustava), Tin Bobetko (Uprise, Zagreb)

Okrugli stol – kako ubrzati zelenu tranziciju s naglaskom na upravljanje potrošnjom/distribuiranom proizvodnjom/skladištima energije? Kako uključiti više dionika programe fleksibilnosti? Koje su prilike za dodatne prihode?

(Manje izmjene u redoslijedu predavanja i sastavu predavača su moguće).

The tutorial will be held in Croatian.

06. PROJECT ACTIVITIES PROJEKTNE AKTIVNOSTI



NEST4WB

**NEW ENERGY COMPETENCE SYSTEM AND TECHNOLOGY FOR WB
ENERGY STABILITY SYSTEM CURRICULUM REFORM**

EN

26.05.26. 9⁰⁰-12⁰⁰

Hall · **Dvorana**, Camelia 1, Grand Hotel Adriatic

ORGANIZERS

MIPRO and Faculty of Engineering, University of Rijeka

CONTACT

Rene Prenc, rene.prenc@riteh.uniri.hr (Faculty of Engineering, Rijeka)

CHAIR

Bojan Prlinčević, bojan.prlincevic@akademijakm.edu.rs (Kosovo and Metohija Academy of Applied Studies, Leposaviq, Kosovo)

EVENT TYPE

Dissemination event, SC, PMC, QAC Meetings

PROJECT GOAL

The main goal of the NEST4WB project is to improve competencies and the quality of higher education in the energy sector in line with the EU Action Plan. Experts with enhanced competencies will increase the relevance of the NEST4WB project for the labor market and society as a whole by establishing and raising awareness about energy use in the Western Balkan countries. These experts will have open access to the labor market throughout the Western Balkans and Europe.

TARGET AUDIENCE

Faculty and researchers in the field of electrical and power engineering, students, assistants and senior assistants, experts from energy companies and industry, as well as anyone interested in expanding their knowledge.

PRELIMINARY PROGRAM

1. Bojan Prlinčević (Academy of Applied Studies of Kosovo and Metohija, Leposaviq, Kosovo)
Project Results And Achievements
2. Miroslav Vozňák (Technical University of Ostrava, Czech Republic)
Draft Annual Quality Report and Quality Plan
3. Danijela Zubac (Academy of Applied Studies of Kosovo and Metohija, Leposaviq, Kosovo)
Report on Status of Cooperation Agreements, Tasks and Deliverables

The event will be held in English.

FREE ACCESS / SLOBODAN PRISTUP

**28.05.26. 9⁰⁰-13⁰⁰****Hall · Dvorana Camelia 1, Grand Hotel Adriatic****ORGANIZERS**

MIPRO and Jožef Stefan Institute

CONTACTAleksandra Rashkovska Koceva, aleksandra.rashkovska@ijs.si (Jožef Stefan Institute, Ljubljana, Slovenia)**CHAIR**Panče Panov, pance.panov@ijs.si, Dragi Kocev, dragi.kocev@ijs.si, Aleksandra Rashkovska Koceva, aleksandra.rashkovska@ijs.si (Jožef Stefan Institute, Ljubljana, Slovenia)**EVENT TYPE**

Dissemination event

EVENT GOAL

The main goal of the SLAIF project is to strengthen the adoption and impact of artificial intelligence across key sectors by providing accessible infrastructure, advanced tools, and user-oriented services. Through this event, SLAIF aims to present its vertical AI services and demonstrate their relevance for real-world applications in areas such as energy, health, digital society, and science. Given the regional context of the conference, the event will also serve as a platform to foster cross-border AI collaboration, particularly between Slovenia, Croatia, and the wider Western Balkan region, promoting knowledge exchange, capacity building, and the development of a connected and inclusive AI ecosystem aligned with European priorities.

TARGET AUDIENCE

Industry stakeholders and SMEs, researchers and technical experts, public sector and policy stakeholders.

PRELIMINARY PROGRAM

The programme will feature presentations of mature SLAIF services across all vertical domains, delivered by representatives of the respective development teams.

- **AI for Green Transition**
- **AI for Health and Biotechnology**
- **AI for Digital Society**
- **AI for Science**

The event will be held in English.**FREE ACCESS / SLOBODAN PRISTUP**



MULTI-STEM

PROMOCIJA STEM TEHNOLOGIJA MULTIDISCIPLINARNIM PRISTUPOM – MULTISTEM

HR

26.05.26. 12⁰⁰-13⁰⁰

Congress Hall · Kongresna dvorana, Grand Hotel Adriatic

ABOUT PROJECT · O PROJEKTU

ORGANIZER · ORGANIZATOR

MIPRO i Akademija tehničkih znanosti - HATZ

CHAIR AND CONTACT · VODITELJICA I KONTAKT

Snježana Babić, snjezana.babic.ce@gmail.com (Fakultet informatike Sveučilišta Jurja Dobrile u Puli)

PROJECT GOAL · CILJ PROJEKTA

Razviti održive programe koji povećavaju interes za STEM područja među učenicima, s naglaskom na otkrivanje, praćenje i usmjeravanje talenata, kao i na povećanje rodne ravnopravnosti kroz aktivno uključivanje učenika u promociju prirodoslovnih znanosti (fizike, matematike, kemije, biologije, ekologije) uz podršku ICT-a u STEM aplikacijama kroz multidisciplinarni pristup.



multistem

ABOUT EVENT · O DOGAĐAJU

EVENT NAME · NAZIV DOGAĐAJA

MULTI-STEM & MEMA dan „Otkrijmo zajedno“

CHAIRS AND CONTACT · VODITELJICE I KONTAKT

Marina Čičin-Šain, cicin.sain.marina@gmail.com (Društvo kibernetičara, Rijeka), Snježana Babić, snjezana.babic.ce@gmail.com (Fakultet informatike Sveučilišta Jurja Dobrile u Puli)

PRELIMINARY PROGRAM · PRELIMINARNI PROGRAM

1. Marina Čičin-Šain (Društvo kibernetičara, Rijeka), Snježana Babić (Fakultet informatike Sveučilišta Jurja Dobrile u Puli)
MEMA u projektu MULTI-STEM – učenje koje povezuje igru, znanje i kreativnost
2. Učenici osnovnih škola
Igrokaz “Moje računalo” i prigodni program

EVENT GOAL · CILJ DOGAĐAJA

Glavni cilj MULTI-STEM & MEMA dana „Otkrijmo zajedno“, Opatija (MIPRO), jest potaknuti multidisciplinarnost i kreativnost u STEM području među učenicima osnovnih škola te predstaviti MEMA metodu kao inovativan pristup razvoju logičkog i računalnog mišljenja.

TARGET AUDIENCE · CILJANA PUBLIKA

Učenici osnovnih škola, učitelji, nastavnici, edukatori i svi zainteresirani za inovativne pristupe u STEM obrazovanju i primjenu metode MEMA.

The event will be held in Croatian.

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07. CONFERENCES SAVJETOVANJA



Accepted papers will be published in the ISSN registered conference proceedings. Presented papers in English will be submitted for inclusion in the IEEE Xplore Digital Library. After being published on IEEE Xplore, they are going to be indexed in Scopus and Compendex.

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Prema Ministarstvu znanosti i obrazovanja RH i Matičnom odboru za područje elektrotehnike i računarstva, radovi na konferencijama pisani na engleskom jeziku i razvrstani u kategoriju znanstvenih radova priznaju se u postupku izbora u znanstveno-nastavna zvanja.

Note: The exact schedule of paper presentations will be published on MIPRO web pages.

Važno: Točan raspored predavanja bit će objavljen na portalu MIPRO.



AI

ARTIFICIAL INTELLIGENCE SYSTEMS
SUSTAVI UMJETNE INTELIGENCIJE

EN

28.05.26. 09⁰⁰-13⁰⁰, 15⁰⁰-19⁰⁰
29.05.26. 09⁰⁰-13⁰⁰, 15⁰⁰-17⁰⁰

Hall · Dvorana Camelia 2, Grand Hotel Adriatic



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INVITED LECTURE · POZVANO PREDAVANJE

Davor Runje (Synthpop AI, Zagreb, Croatia)

Communicating AI Agents

OPTIMIZATION, FORMAL METHODS AND IMAGE ANALYSIS

1. J. Sabljo, M. Đumić (School of Applied Mathematics and Informatics, Osijek, Croatia), M. Đurasević (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Analysis of Training Models for Evolving Heuristics in the Unrelated Parallel Machines Scheduling Problem with Additional Resources
2. J. Angeloska, D. Usovikj, M. Toshevska, S. Gievska (Faculty of Computer Science and Engineering, Skopje, North Macedonia)
Benchmarking the Gap between Theory and Practice in Multi-Agent Reinforcement Learning
3. V. Vaskin (ITMO University, Saint Petersburg, Russia), A. Semenov (Matrosov Institute for System Dynamics and Control Theory of SB RAS, Irkutsk, Russia)
Adapting Cube-and-Conquer Technology to CircuitSAT
4. G.A. Oparin, V.G. Bogdanova, A.A. Pashinin (Matrosov Institute for System Dynamics and Control Theory of SB RAS, Irkutsk, Russia)
Dynamic Coverage of All Graph Vertices in Multi-Agent Pathfinding
5. H. Nuić, D. Vršnak, S. Lončarić (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Automatic Exposure Control Guided by No-Reference Image Quality Estimation
6. R. Franetović, M. Subašić (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Comparison of the General Linear Model with Classical Color Correction Models for Color Calibration
7. I. Reljić, S. Seljan, I. Dunđer (Faculty of Humanities and Social Sciences, Zagreb, Croatia)
3D Reconstruction Using Artificial Intelligence: Photographic Data Requirements, Sensitivity and Model Robustness

COMPUTER VISION

1. D. Gržinić, M. Ivašić-Kos (Faculty of Informatics and Digital Technologies, Rijeka, Croatia)
Detection of Sprites in Night Sky Images Using the YOLO Model
2. D. Kučak, B. Skračić, D. Pečarina (Algebra Bernays University, Zagreb, Croatia)
On-Device Computer Vision and Monte Carlo Simulation for Board Game Unit Recognition and Battle Outcome Estimation
3. V. Dimitrievska (Silicon Austria Labs, Villach, Austria), N. Ackovska, I. Ivanoska (Faculty of Computer Science and Engineering, Skopje, North Macedonia)
Graph Neural Networks for Explainable Computer Vision in Robotics: An Overview
4. A. Bošnjak, P. Pejić, R. Cupec, J. Job, E.K. Nyarko (Faculty of Electrical Engineering, Computer Science and Information Technology Osijek, Croatia), B. Lukić (Faculty of Agrobiotechnical Sciences Osijek, Croatia)
Computer Vision for Automated Cattle Monitoring: A Review of Detection, Tracking, and Re-Identification
5. M. Stipičević, M. Ivanković, S. Stipetić, T. Radišić (Faculty of Transport and Traffic Sciences, Zagreb, Croatia)
Cross-Modal Weak Supervision Training of UAV Detection Model for Degraded Environments
6. B. Baftijari (Faculty of Natural Sciences and Mathematics, Tetovo, North Macedonia), S. Koceski, N. Koceska (Faculty of Computer Science, Stip, North Macedonia)
Object Recognition in Household Environments Using YOLOv11
7. B. Jakupović, D. Đekić, K. Host, M. Ivašić-Kos (Faculty of Informatics and Digital Technologies, Rijeka, Croatia)
Pedestrian Tracking in Dynamic Urban Scenes Using YOLO11x and OC-SORT with Camera-Motion Compensation

NATURAL LANGUAGE PROCESSING - I

1. L. Hobor, M. Brčić, M. Kovač, K. Poje (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Bayesian Elicitation with LLMs: Model Size Helps, Extra “Reasoning” Doesn’t Always

2. R. Peran, N. Bačić, M. Kovač, M. Brčić (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Large Language Models as Optimizers: A Survey of Direct vs. Tool-Augmented Approaches and Their Performance Frontiers
3. M. Jakimoski, M. Toshevska, S. Gievska (Faculty of Computer Science and Engineering, Skopje, North Macedonia)
From Syntax Trees to Embeddings: A Comparative Study of AI-Generated Code Detection
4. J.L. Blanco-Guzman (Department of Financial Economics and Operations Management, University of Seville, Spain), J.A. Higuera-Reina (Department of Business Administration and Marketing, University of Seville, Spain), P. Bornes Roldan (Department of Financial Economics and Operations Management, University of Seville, Spain)
From Search Rankings to Answer Rankings: Generative Search and the Transformation of Online Visibility
5. A. Nedbaylo, D. Hristovski (Faculty of Public Administration, Ljubljana, Slovenia)
Large Language Model-Driven Literature-Based Discovery: A Retrieval-Augmented Generation Framework for Hypothesis Generation and Evidence-Based Screening

NATURAL LANGUAGE PROCESSING – II

1. J. Rybicki (Jülich Supercomputing Center, Germany)
How to Chat with a Supercomputer
2. J. Scheffler, S. Naumann, F. Mohr, L. Begić Fazlić (Birkenfeld Institute of Technology, Trier University of Applied Sciences, Germany)
Characterizing Prefill and Decode Regimes for Edge LLM Inference
3. I.I. Kostadinova, M. Garvanova, I. Garvanov (University of Library Studies and Information Technologies, Sofia, Bulgaria), N. Kerimbayev (Al-Farabi Kazakh National University, Almaty, Kazakhstan)
Linguistic Sovereignty in Algorithmic Recommendation Systems
4. M. Ribarić, A. Poleksić, S. Martinčić Ipšić (Faculty of Informatics and Digital Technologies, Rijeka, Croatia)
An Empirical Comparison of LoRA and DoRA for Parameter-Efficient Fine-Tuning for Climate Change
5. C. Martínez-Araneda, M. Gutiérrez Valenzuela, P. Gómez-Meneses (Department of Computer Science, Universidad Católica de la Santísima Concepción, Chile), D. Maldonado Montiel (Department of Mathematical, The University of Talca, Chile), A. Segura Navarrete, C. Vidal-Castro (Department of Information Systems, Universidad del Bío-Bío, Concepción, Chile), A. Pérez Álvarez (Department of Computer Science, Universidad Católica de la Santísima Concepción, Chile)
A Curated Spanish-Language Dataset for Detecting LGBTQIA-Phobic Language in Digital Environments
6. M. Krajiči, S. Ljubić, I. Wolf, I. Štajduhar (Faculty of Engineering, Rijeka, Croatia)
Multilingual Housekeeping Automatic Speech Recognition and Intent Classification

AI IN EMBEDDED AND EDGE SYSTEMS

1. D. Leko (Faculty of Electrical Engineering and Computing, Zagreb, Croatia), F. Golubić, N. Čerkez (Rimac Technology, Zagreb, Croatia), M. Vašak (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Implementation of a Protective Set on a Microcontroller with a Floating-Point Unit Support
2. J. Ledenčan, J. Zidar, I. Vidović, T. Matić (Faculty of Electrical Engineering, Computer Science and Information Technology Osijek, Croatia)
Application of FPGA-Based AI Systems for Smart Agriculture: A Review across Field Crops, Fruits, and Vegetables
3. D.A.N. Gookyi, E.S. Nansuuri, J.P. Awotwi, M. Wilson, R.K. Ahiadormey (Institute for Scientific and Technological Information, Council for Scientific and Industrial Research, Accra, Ghana), L.M. Chabala (Department of Soil Science, University of Zambia, Lusaka, Zambia), O.T. Damba (Department of Agricultural and Food Economics, University for Development

Studies, Tamale, Ghana)

A Low-Cost Hardware-Mobile Platform for Comprehensive Soil Monitoring, Crop Phenotype, and Image Dataset Acquisition

4. D.A.N. Gookyi, R. Tetteh (Institute for Scientific and Technological Information, Council for Scientific and Industrial Research, Accra, Ghana), R. Gyaang (Department of Electrical and Electronics Engineering, Bolgatanga Technical University, Ghana), C. Tengan (Department of Building Technology, Bolgatanga Technical University, Ghana), P. Danquah, S. Bekoe (Institute for Scientific and Technological Information, Council for Scientific and Industrial Research, Accra, Ghana), S.A. Danso (Department of Computer Engineering, Ghana Communication Technology University, Accra, Ghana)

Survey and Design Framework: Comparative Evaluation of Edge Computing Platforms for Low-Cost AI-Enabled Real-Time Soil Monitoring, Dataset Collection, Crop Recommendation, and Fertilizer Optimization in African Settings

5. E. Guberović, I. Čavrak, I. Biuk (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)

FEDCODE: A Modular Framework for Evaluating Communication Compression in Federated Learning

6. M. Vukšić, J. Čelić (Faculty of Maritime Studies, Rijeka, Croatia), T. Bronzin, B. Prole, D. Adamec, A. Stipić (CITUS, Zagreb, Croatia), D. Katović (Faculty of Kinesiology, Zagreb, Croatia)
- ### **Hybrid Digital Twin and Deep Learning Framework for Monitoring Maritime Refrigerated Containers**

ARTIFICIAL INTELLIGENCE APPLICATIONS AND OTHER TOPICS - I

1. M. Burić (Hrvatska elektroprivreda, Rijeka, Croatia)
- ### **Identifying Structural Patterns in Short-Term Electricity Load Forecasting Using Explainable AI**

2. F. Aziz, M. Žnidaršič, A. Osojnik, B. Ženko (Department of Knowledge Technologies, Jožef Stefan Institute, Ljubljana, Slovenia)

Addressing Skewed Distributions in Electricity Consumption Forecasting

3. S. Baressi Šegota (Faculty of Informatics, Pula, Croatia), N. Anđelić, V. Mrzljak (Faculty of Engineering, Rijeka, Croatia), M. Bobanović Dasko, I. Lorencin (Faculty of Informatics, Pula, Croatia)

Understanding the Energy Expenditure Predictors of Collaborative Robots Using Statistical and Machine Learning Methods

4. J. Dobruna, Z. Limani Fazliu, E. Hamiti, E. Mucolli (Faculty of Electrical and Computer Engineering, Prishtina, Kosovo), M. Volk (Faculty of Electrical Engineering, Ljubljana, Slovenia)
- ### **AI-Driven Prediction of Electric Field and Magnetic Flux Density in Electric, Hybrid, and Mild Hybrid Vehicles**

5. M. Boban (Faculty of Law, Split, Croatia), M. Gombar (Armed Forces of the Republic of Croatia, Zagreb, Croatia), M. Pejić Bach (Faculty of Economics and Business, Zagreb, Croatia)
- ### **From Susceptibility to Resilience: Validating User-Level Audit Support Measures for AI-Mediated Platforms**

6. R. Orlić, S. Baressi Šegota, A. Novak, I. Lorencin (Center for Applied Artificial Intelligence, Pula, Croatia)

Croatian State Exam Benchmark: Evaluating Large Language Models on High School Croatian Language Proficiency

7. A. Kitanovski, M. Toshevska, S. Gievska (Faculty of Computer Science and Engineering, Skopje, North Macedonia)

Knowledge-Assisted Prompting for Sentiment Transfer

8. S. Papić, K. Josić, B. Kostelac (Algebra Bernays University, Zagreb, Croatia)

Trustworthiness of AI-Generated Network Configurations

ARTIFICIAL INTELLIGENCE APPLICATIONS AND OTHER TOPICS - II

1. C. Quintana Reyes, A. Segura-Navarrete (Department of Information Systems, Universidad del Bio-Bío, Concepción, Chile), C. Martínez-Araneda (Department of Computer Science, Universidad Católica de la Santísima Concepción, Chile), C. Vidal-Castro (Department of Information Systems, Universidad del Bio-Bío, Concepción, Chile), P. Gómez-Meneses

(Department of Computer Science, Universidad Católica de la Santísima Concepción, Chile)
SafeTune – a Deep Learning-Based Application for Detecting Gender-Based Violence against Women in Song Lyrics

- I. Kovačević, I. Aleksi, T. Matić (Faculty of Electrical Engineering, Computer Science and Information Technology Osijek, Croatia)

Application of AI across the Wine Production Process

- P. Prenc, I. Lorencin (Faculty of Informatics, Pula, Croatia)
Utilization of Semantic Routing for the Development of an Intelligent Student Support Chatbot

- P. Kuhar, A. Mandić (University North, Koprivnica, Croatia)
Artificial Intelligence in Public Relations: A Bibliometric Analysis of Research Trends and Thematic Structures

- I. Mishkovski, F. Avramoski, M. Stojcheva (Faculty of Computer Science and Engineering, Skopje, North Macedonia)

Intelligent Thesis Committee Recommendation System Using Relational Graph Convolutional Networks

- Y. Januzaj, E. Beqiri (University “Haxhi Zeka”, Peja, Kosovo), A. Luma (South East European University, Tetovo, North Macedonia)

An AI-Based Framework for Academic Staff Performance Evaluation in Public Universities

- D. Leljak, E.M. Maruševac, A. Najev, S. Vojvodić, K. Vidović (Ericsson Nikola Tesla, Zagreb, Croatia)

LTE Data-Based Traffic Flow Estimation Using Machine Learning: A Case Study for the City of Matulji



BIS-BDP

BUSINESS INTELLIGENCE SYSTEMS AND BIG DATA PROCESSING
POSLOVNI INTELIGENTNI SUSTAVI I OBRADA VELIKIH PODATAKA

EN

27.05.26. 16⁰⁰-19⁰⁰

Hall · **Dvorana** Bellavista, Grand Hotel Adriatic



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1. I. Mekterović, Lj. Brkić, M. Tadijal, T. Vanjak (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Evolving Programming Education with AI: Opportunities and Challenges of LLM-Integrated Assessment Systems
2. A. Flego, I. Mekterović (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Retrieval-Augmented Generation System for Academic Knowledge Access
3. Lj. Brkić, H. Smontara, B. Franc, I. Mekterović (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Application of Machine Learning and Deep Learning Methods for Solar Power Generation Forecasting
4. M. Kos, D. Pintar (Faculty of Electrical Engineering and Computing, Zagreb, Croatia), F. Vuić, K. Potočki (Faculty of Civil Engineering, Zagreb, Croatia)
Comparative Assessment of Unsupervised Machine Learning Methods for Flood Wave Shape Analysis
5. D. Delija, M. Žagar, I. Špoljarić, G. Sirovatka (Zagreb University of Applied Sciences, Croatia)
Cyber Forensics as a Constrained Form of Data Mining: A Methodological Perspective for Cyber Investigations
6. M. Gulić (Faculty of Maritime Studies, Rijeka, Croatia), P. Turkalj (Holland America Line, Seattle, United States), M. Valčić (Maritime Department, University of Zadar, Croatia), N. Grubišić (Faculty of Maritime Studies, Rijeka, Croatia)
Experimental Analysis of Pseudorandom Number Generators Considering Sequence Quality and Energy Consumption
7. M. Tominac (Rimac Technology, Zagreb, Croatia), M. Krvavica, M. Vašak (Faculty of Electrical Engineering and Computing, Zagreb, Croatia), N. Čerkez (Rimac Technology, Zagreb, Croatia)
Design of Experimental Procedures for Characterization of Battery Cells Aging
8. M. Nikolić, S. Stanković (The Academy of Applied Technical and Preschool Studies, Niš, Serbia), M. Marjanović (Singidunum University, Belgrade, Serbia)
Integrating Generative AI into Business Intelligence for Sustainable Tourism Reporting
9. B. Agić, E. Mešković (Faculty of Electrical Engineering, Tuzla, Bosnia and Herzegovina)
An Incremental Computing Approach for Geospatial Queries



25.05.26. 10⁰⁰-13⁰⁰, 15⁰⁰-19⁰⁰
 26.05.26. 09⁰⁰-12⁰⁰, 15⁰⁰-18⁰⁰
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 28.05.26. 09⁰⁰-13⁰⁰, 15⁰⁰-19⁰⁰
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PAPERS · RADOVI

1. D. Lukač (CEEC, Siegburg, Germany), M. Kadrnožková (Charles University, Prague, Czech Republic)
AI in Academic Evaluation: Current Position, Key Challenges, and Approaches to Mitigating AI-Driven Plagiarism
2. H.D. Singh, M.J. Dinneen, S. Manoharan (The University of Auckland, New Zealand)
Evaluating Kernel Isolation for Performance and Security in CS Assignments
3. M. Duić (Department of Information Sciences, University of Zadar, Croatia)
Exploration of the Croatian Photographic Heritage in Europeana
4. M. Drushlyak, D. Budianskyi, V. Shamonina, A. Bobokalo, H. Skoropad, O. Semenikhina (Sumy State Pedagogical University named after A.S. Makarenko, Ukraine)
Moral Dilemmas of Using AI in Academia: What Do Students Think?
5. M. Drushlyak, T. Lukashova, D. Ielizarenko, O. Nadtochy, S. Korzh (Sumy State Pedagogical University named after A.S. Makarenko, Ukraine)
Digital Tools in the Training of Future Doctors of Philosophy in Mathematics
6. J. Henno (TalTech, Tallinn, Estonia), H. Jaakkola (University of Tampere, Finland), J. Mäkelä (University of Lapland, Rovaniemi, Finland)
Programming 3
7. M. Slobodanac (Mono Software, Osijek, Croatia), M. Mićunović, A. Papić (Faculty of Social Sciences and Humanities, Osijek, Croatia)
Exploring LIS Students' Preferences towards Artificial Intelligence Tools
8. Y. Rudenko, T. Stepanova, S. Ahadzhanova, K. Ahadzhanov-Honsales (Sumy National Agrarian University, Ukraine), D. Davidenko, N. Dehtiarova (Sumy State Pedagogical University named after A.S. Makarenko, Ukraine)
Applying Orange Data Mining for Exploratory LMS Analytics: A Comparative Case Study of Chinese and Ukrainian Students' Learning Behaviors
9. N. Dehtiarova (Sumy State Pedagogical University named after A.S. Makarenka, Ukraine), O. Zhmud, M. Medvedieva, L. Titova (Pavlo Tychna Uman State Pedagogical University, Ukraine), O. Viunenko (Sumy National Agrarian University, Ukraine), M. Pronikova (Sumy

State Pedagogical University named after A.S. Makarenka, Ukraine)

Development of Competence of Future Computer Science Teachers for Working with High-Potential Students

10. O. Zhmud (Pavlo Tychyna Uman State Pedagogical University, Ukraine), T. Hryhorenko (National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine), O. Pidhornyi, I. Kovtaniuk (Pavlo Tychyna Uman State Pedagogical University, Ukraine), I. Malyk (Lviv Polytechnic National University, Ukraine), V. Pleskan, N. Dehtiarova (Sumy State Pedagogical University named after A.S. Makarenko, Ukraine)

Formation of Methodological Competence of Future Teachers in the Selection and Use of Digital Learning Environments in Conditions of Saturation with Digital Tools

11. J. Guniš, L. Šnajder, D. Kotlárová, K. Brinziková (Pavol Jozef Šafárik University in Košice, Slovakia)

Use of Large Language Models in the Evaluation of Open-Ended Questionnaire Responses: A Case Study

12. A. Yurchenko, O. Kudrina (Sumy State Pedagogical University named after A.S. Makarenko, Ukraine), V. Riznyk (Hryhorii Skovoroda University in Pereiaslav, Ukraine), Y. Khvorostina, Y. Diementiev, O. Semenikhina (Sumy State Pedagogical University named after A.S. Makarenko, Ukraine)

Selecting Digital Tools for Collaborative STEM Learning in War-Affected Higher Education Based on an Analytic Hierarchy Process Approach

13. O. Kudrina, A. Yurchenko, I. Chystiakova (Sumy State Pedagogical University named after A.S. Makarenko, Ukraine), O. Kovtun (Hryhorii Skovoroda University in Pereiaslav, Ukraine), V. Bepalyi, O. Semenikhina (Sumy State Pedagogical University named after A.S. Makarenko, Ukraine)

VOSViewer-Based Workshop for PhD Students and the Development of Their Research Skills

14. A. Yurchenko (Sumy State Pedagogical University named after A.S. Makarenko, Ukraine), I. Kharchenko (Sumy National Agrarian University, Ukraine), M. Ostroha, T. Aleksakhina, I. Gorovoy, O. Semenikhina (Sumy State Pedagogical University named after A.S. Makarenko, Ukraine)

Digital Multilingualism and IT-Supported Language Education in Higher Education

15. L. Sytnyk (Sumy National Agrarian University, Ukraine), K. Zhurba (Institute of Problems on Education of the NAES of Ukraine, Kyiv, Ukraine), Y. Rudenko (Sumy National Agrarian University, Ukraine), S. Petrenko, M. Soroka, O. Semenikhina (Sumy State Pedagogical University named after A.S. Makarenko, Ukraine)

Low-Code Platforms for Teaching Big Data Analytics: A Comparative Study of Orange Data Mining, Weka, and KNIME

16. O. Shukatka (Ivan Franko National University of Lviv, Ukraine), N. Oliinyk (Vinnytsia Mykhailo Kotsyubynskyi State Pedagogical University, Ukraine), S. Kharchenko (Sumy National Agrarian University, Ukraine), A. Yurchenko, S. Bohoslavskiy, O. Semenikhina (Sumy State Pedagogical University named after A.S. Makarenko, Ukraine)

Hybrid Learning for Pre-Service Physical Education Teachers: Conceptual Model in a Digital Learning Environment and its Expert Evaluation

17. N. Ponomarenko (Machine Building College Sumy State University, Ukraine), O. Semenog (Sumy State Pedagogical University named after A.S. Makarenko, Ukraine), M. Sadvynycha (Sumy State University, Ukraine), L. Lukianyk (Rivne State Humanitarian University, Ukraine), D. Davydenko, O. Semenikhina (Sumy State Pedagogical University named after A.S. Makarenko, Ukraine)

Analysis of the Relationship between ICT Use, Media Literacy, and Media Trauma among Students in a War-Affected Border Region (Sumy, Ukraine)

18. H. Jaakkola (Tampere University, Pori, Finland), J. Henno (TalTech, Tallinn, Estonia), J. Mäkelä (University of Lapland, Rovaniemi, Finland)

The New Era of AI – What is It and Where are We Going?

19. A. Mirković Moguš, K. Dobi Barišić (Faculty of Education, Osijek, Croatia)

Exploring Students' Prompt Engineering Practices and Competencies in Higher Education

20. Y. Rudenko, V. Pivtoraiko (Sumy National Agrarian University, Ukraine), M. Antonchenko, L. Sierykh (Sumy Regional Institute of Postgraduate Pedagogical Education, Ukraine), O. Saenko, N. Dehtiarova (Sumy State Pedagogical University named after A.S. Makarenko, Ukraine)
Developing Digital Competencies in Learning through Visualized Plant Protection Case Studies
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Offline-First PWA for Teaching Informatics in Wartime Conditions: Architecture and Survey Results
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AI Reliance in Schools: Scale Adaptation, Initial Validation, and Insights from a Croatian Teacher Sample
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Learning Analytics-Driven Personalization of Mathematics and Digital Skills Development for Pre-Service Teachers
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Effectiveness of Digital Microlearning Units in the Mathematical Training of Students of Non-Mathematical Specialties
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Beyond Screens: Teachers' Perceptions of AI Tools and Educational Robotics in Primary Programming Education
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AI Literacy in Higher Education: Students' Perceptions at the Faculty of Humanities and Social Sciences, University of Zagreb on the Role of Artificial Intelligence in the Learning Process
27. K. Aleksić-Maslač, F. Borović, M. Kovačić (Zagreb School of Economics and Management, Croatia)
Great Potential of Generative AI Tools in Education: A Comparative Analysis of Leading GenAI Systems
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Analysis of Students' Guided Self-Reflection after Digitally Supported Fieldwork in Physics Education
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Developing Active Learning Environments: AI-Enhanced Open-Source VR for Semiconductor Manufacturing
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A Comparative Analysis of Human and AI-Based Assessment of Team-Based Business Simulation Projects
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Building Data Analysis Competencies in Economics Education: A Structured Learning Path with Industry Collaboration
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Utilisation of Artificial Intelligence Tools in Teaching Entrepreneurial Skills: Experiences from a Pilot Course
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Enhancing Visual Accessibility of Projected Educational Content in Teaching Environments Using Software-Based Visual Interaction
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Enhancing Educational Integrity: Leveraging RAG-Based NotebookLM for Reliable

Moodle Question Bank Automation

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Student Engagement in Linear Algebra through Programming
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The Association of Formative Feedback with Engagement and Student Performance
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Artificial Intelligence in Primary Education: Teachers' and Parents' View
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Comparison of Online Testing and Onsite Testing Results in Combinatorics and Working with Data
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A Teacher-Centered Mobile Application for Screening Learning Disabilities to Support Inclusive Education
41. K. Bedi (School of Civil Engineering, Art and Craft Čakovec, Croatia)
Artificial Intelligence and Student Writing: A Comparative Case Study
42. S. Kocijančič, R. Gabrovšek (Faculty of Education, Ljubljana, Slovenia)
Teaching Smart Devices in Primary School through Simulation and Large Language Models
43. K. Stanič (Secondary School of Economics and Gymnasium Maribor, Slovenia), A. Špernjak (Faculty of Natural Sciences and Mathematics, Maribor, Slovenia)
Developing Teachers' Digital Competencies through the Designing Augmented Reality Learning Materials for Biology Education
44. A. Christopoulos (Turku Research Institute for Learning Analytics, University of Turku, Finland), S. Mystakidis (School of Natural Sciences, Patras, Greece), M.J. Laakso (Turku Research Institute for Learning Analytics, University of Turku, Finland)
The Experiential Quantum Framework: Design Principles for Immersive Virtual Reality in Quantum Mechanics Education
45. J.L. Blanco-Guzman, C. Ceballos-Hernandez, E. de la Torre Monge, M.D. Garcia-Gallo (Department of Financial Economics and Operations Management, University of Seville, Spain)
From Mobile Learning to Screen-Free Education? A Bibliometric Analysis of a Post-Pandemic Shift
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Hybrid Human AI Framework for Personalized Feedback and Student Learning Enhancement via Exercise Assessment
47. K. Pavlina, A. Pongrac Pavlina, A. Modrušan (University of Zagreb, Croatia)
Teachers' Use and Perceptions of Digital Educational Resources Developed within the E-Schools Project
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Application of Software Solutions for Monitoring and Controlling Student Activity
49. I. Sekovanić, T. Adamović (Bjelovar University of Applied Sciences, Croatia), D. Vidić (Bjelovar Gymnasium, Croatia)
Automated Assessment of University Programming Exams Using Gemini API
50. C. Ungermanns, W. Werth, M. Ungermanns (Carinthia University of Applied Sciences-CUASE, Villach, Austria)
From Chaos to Kits: A Lightweight Sorting Approach for Construction Bricks in STEM Learning

51. V. Kalajžić, B. Miočić (Department of Applied Communication Studies, University of Zadar, Croatia)
Education and Artificial Intelligence in Articles on the Hrčak Portal – A Communication Perspective
52. N. Bošnjaković (Primary School Vođinci, Croatia), I. Đurđević Babić (Faculty of Education, Osijek, Croatia)
Artificial Neural Network for Identifying Teachers' Attitudes toward Digital Gamification
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Student Insights on the Use of GenAI for the Development of Interpersonal Communication Skills in English as a Foreign Language: A Preliminary Study
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Large Language Models in Teaching about DecisionMaking Errors: Potential Applications in Academic Courses on Public Health, Political Science, and History
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57. M. Konecki, J.J. Antolos, M. Konecki (Faculty of Organization and Informatics, Varaždin, Croatia)
Artificial Intelligence as an Aiding Tool Among Higher Education Students
58. I. Valova, T. Kaneva, G. Kanev, N. Todorova (Department of Computer Systems and Technologies, University of Ruse, Bulgaria)
AI Agents in University Education: A Benefit or an Obstacle?
59. D. Valenčić (University of Applied Sciences Velika Gorica, Croatia)
Implementation of Cisco Network Academy in IT University Education
60. G. Hajdin, D. Plantak Vukovac (Faculty of Organisation and Informatics, Varaždin, Croatia), T. Milec (Electrical Engineering School Varaždin, Croatia)
Gamification in Secondary Vocational Education: A Case Study of Student and Teacher Perspectives
61. M. Bednjanec (Zagreb University of Applied Sciences, Croatia), S. Jovčić, D. Nižetić (VERN' University, Zagreb, Croatia)
Information Systems for Teaching Management in Higher Education
62. M. Bednjanec (Zagreb University of Applied Sciences, Croatia), S. Jovčić (VERN' University, Zagreb, Croatia), M. Nižetić (Vladimir Prelog Science School, Zagreb, Croatia)
Artificial Intelligence as a Time-Efficiency Enabler in Academic Assessment Practices
63. J. Kordek (Zagreb University of Applied Sciences, Croatia), Z. Lavrić (Ericsson, Zagreb, Croatia), M. Miletić (Zagreb University of Applied Sciences, Croatia)
Design and Development of the Electronic Board Game Man, Don't Get Angry for Embedded Systems Showcase
64. J. Mezak, S. Vranić (Faculty of Teacher Education, Rijeka, Croatia)
Preparing Future Early Childhood Educators for Educational Robotics and Inquiry-Based Learning
65. I. Heđi (Virovitica University of Applied Sciences, Croatia), M. Kepec (Infobip, Virovitica, Croatia), M. Poldrugač (Valcon, Virovitica, Croatia)
Using Infrastructure as Code for Enhancing Cloud Computing Education in Constrained Environments
66. A. Kiričenko (Zagreb University of Applied Sciences, Croatia)
An End-to-End Open-Source Toolchain for Rapid In-House PCB Prototyping in Electrical Engineering Education
67. F. Škopljanac-Mačina, S. Horvatić, D. Popović (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Exploring the Use of Generative Artificial Intelligence Tools for Solving Electrical Engineering and Physics Problems

68. V. Lugarić, I. Brčić, A. Sović Kržič (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Assessing LEGO Model Assembly Difficulty
69. R. Kubík, P. Voštinár (Matej Bel University in Banská Bystrica, Slovakia)
Vibe Programming at Primary School
70. L. Marković, G. Šantić, T. Babić (VERN' University, Zagreb, Croatia)
Digital Detox in Academic Contexts – University Students' Awareness and Attitudes
71. S. Reichel, P. Jurić, T. Babić (VERN' University, Zagreb, Croatia)
Research on Perceived Credibility of Micro-Influencers among Students
72. D. Velickovski, S. Koceski, N. Koceska (Faculty of Computer Science, Stip, North Macedonia)
Mobile Application for On-Demand Conversion of Print Material into Dyslexia-Friendly Formats
73. Đ. Kotlar, P. Smes (VERN' University, Zagreb, Croatia)
Students Awareness of the Link between Social Media Algorithms and Cognitive Bias
74. T. Penniston (University of Maryland, Baltimore, United States), N. Kadoić, N. Begičević Redep (Faculty of Organization and Informatics, Varaždin, Croatia)
Multicriteria Prioritisation of Innovative Strategic Educational Directions in Higher Education
75. M. Šitum (Osnovna škola Granešina, Zagreb, Hrvatska)
Razvoj algoritamskog razmišljanja u razrednoj nastavi kroz metodu MEMA
76. T. Redep, T. Pavičić Zajec (I. Osnovna škola Varaždin, Hrvatska), B. Marčinković (Osnovna škola Bistrica ob Sotli, Slovenija)
Stavovi i mišljenja učitelja o primjeni generativne umjetne inteligencije u izradi prezentacija
77. E. Grmić (Tehnička škola Bjelovar, Hrvatska), A. Tihomirović (Tehnička škola Zagreb, Hrvatska)
Izazovi strukovnog kurikula Tehničar za računarstvo
78. R. Soldo (Strojarska tehnička škola Fausta Vrančića, Zagreb, Hrvatska)
Umjetna inteligencija i kritičko mišljenje u nastavi matematike
79. V. Tasić (Mining and Metallurgy Institute Bor, Serbia), A. Božilov (Faculty of Occupational Safety in Niš, Serbia), R. Kovačević, B. Radović (Mining and Metallurgy Institute Bor, Serbia), Z. Damnjanović (Građanska čitaonica Evropa, Bor, Serbia)
Primjena niskobudžetnog IoT sustava za praćenje kvalitete zraka u unutarnjem prostoru
80. D. Medvedović (Osnovna škola Rovišće, Hrvatska)
Umjetna inteligencija u učionici: problemsko učenje i primjeri iz prakse
81. M. Mirković (Tehnička škola Požega, Hrvatska), D. Možnik (Tehničko veleučilište u Zagrebu, Hrvatska)
Primjena mjera i standarda kibernetičke sigurnosti u eri umjetne inteligencije: civilni i vojni konteksti
82. K. Brleković, D. Ivanović Ižaković (Elektrotehnička i prometna škola Osijek, Hrvatska)
Etičke implikacije umjetne inteligencije
83. K. Brleković (Elektrotehnička i prometna škola Osijek, Hrvatska)
Što je M za STEM?
84. Lj. Ille, R. Fic, M. Varga (Graditeljska škola Čakovec, Hrvatska)
Od ispitanika do istraživača: Radioemisije kao participativna istraživačka metodologija u srednjoškolskom obrazovanju
85. A. Tihomirović, S. Šišić (Tehnička škola Zagreb, Hrvatska)
Prozor u svijet rješavanja problema
86. M. Dergez, D. Fraj, M. Lučan (Tehničko veleučilište u Zagrebu, Hrvatska)
Pojednostavljena interpretacija procesnih računala realizirana mikroupravljačem
87. U. Ramadani, I. Lazović (Institut za nuklearne nauke Vinča, Institut od nacionalnog značaja za Republiku Srbiju, Beograd, Srbija), S. Radojević (Mašinski fakultet, Beograd, Srbija), M. Živković, D. Radivojević, R. Jovanović (Institut za nuklearne nauke Vinča, Institut od nacionalnog značaja za Republiku Srbiju, Beograd, Srbija), V. Tasić (Institut za rudarstvo i metalurgiju Bor, Srbija)
Softverski sustav za prikupljanje, pohranu i vizualizaciju podataka iz mreža senzora kvalitete zraka

88. K. Maček Blažeka (Tehnička škola Ruđera Boškovića, Zagreb, Hrvatska)
Poteškoće početnika u oblikovanju algoritama pri rješavanju jednostavnog problemskog zadatka iz programiranja
89. S. Bunjevac Nikodem (Osnovna škola Dragutina Tadijanovića, Zagreb, Hrvatska)
Korištenje interneta i stavovi o učenju matematike kod zagrebačkih osnovnoškolaca
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Izazovi i pristupi poučavanju programiranja studenata bez prethodnog iskustva u programiranju
91. D. Tich, A. Tonković (Osnovna škola Gornja Vežica, Rijeka, Hrvatska)
Multidisciplinarni pristup u radu s učenicima prvih razreda OŠ Gornja Vežica u Rijeci
92. D. Levstek (KONČAR, Zagreb, Hrvatska), D. Fraj, M. Lučan (Tehničko veleučilište u Zagrebu, Hrvatska)
Probnica za ispitivanje hidro uređaja za kočenje na tramvajima serije TMK2200
93. L. Šagolj (IRON BULL, Zagreb, Hrvatska), D. Fraj, M. Lučan (Tehničko veleučilište u Zagrebu, Hrvatska)
Maketa Braitenbergovog vozila s primjenom P regulatora
94. L. Rogina, D. Fraj, A. Penđer, M. Lučan (Tehničko veleučilište u Zagrebu, Hrvatska)
Elektronička društvena igra „Trčeće svjetlo“
95. D. Kurtić (Agencija za odgoj i obrazovanje, Zagreb, Hrvatska)
Pristupi poučavanju i učenju u nastavi glazbene kulture i glazbene umjetnosti: video lekcija u nastavi na daljinu
96. D. Kurtić (Agencija za odgoj i obrazovanje, Zagreb, Hrvatska)
Stavovi i mišljenja učitelja glazbene kulture, nastavnika glazbene umjetnosti i radne skupine „i-nastava“ o zadovoljstvu korištenja video lekcija u nastavi
97. T. Adamović, I. Sekovanić, A. Petrović (Veleučilište u Bjelovaru, Hrvatska)
Sustav za kontinuirano praćenje i automatsko testiranje studentskog rada u Oracle okruženju
98. S. Kakuk Fridl (Filozofski fakultet Osijek, Hrvatska)
Pedagoški potencijali i rizici generativne umjetne inteligencije u visokom obrazovanju
99. Z. Stapić, D. Peras, D. Ljubas (Fakultet organizacije i informatike, Varaždin, Hrvatska)
Primjena alata temeljenih na umjetnoj inteligenciji kao podrške nastavnicima u analizi tehničkog duga studentskih softverskih projekata



27.05.26. 15⁰⁰-19⁰⁰

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Challenges and Solutions in Replacing the Diffie-Hellman Key Exchange in Secure Post-Quantum Network Protocols
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Towards AI-Driven Cyber Ranges: Automated Attack Graph Generation from Infrastructure-as-Code
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Enriched Attack Graphs as a Research Backbone for Cyber Ranges
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Evaluating the Unified Physical and Deepfake Attack Detection in Face Biometric Systems
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Evaluating LLM Proficiency in Analyzing Privacy Aspects of Network Traffic
10. N. Nelufule (Council for Scientific and Industrial Research-CSIR, Pretoria, South Africa)
PrivSev: Privacy-Preserving Artificial Intelligence in 6G Open Radio Access Networks: A Survey
11. I. Sladić, D. Delija, M. Žagar, G. Sirovatka (Zagreb University of Applied Sciences, Croatia)
LLMs as a Triage Tool in Network Forensic Analysis: An Evaluation on PCAP Metadata

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A Field Experiment in USB Baiting at a Private University
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Effects of Informing Website Owners about Third-Party Data Leaks
14. I. Tomičić, P. Grd, D. Tuličić (Faculty of Organization and Informatics, Varaždin, Croatia)
A Framework for Assessing the Codifiability of NIS2-Derived Cybersecurity Requirements
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Automation of IT Security Policy Management in Small Enterprises
16. D. Tuličić, R. Fabac (Faculty of Organizations and Informatics, Varaždin, Croatia), D. Delija (Department of Information and Computer Sciences, Zagreb University of Applied Science, Croatia)
Cyber or Cybernetic Security as a Naming Problem and the Referential Gap in the Ontology of Security



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Pavle Skočir (Axiros, Zagreb, Croatia)

Application of Telecommunications Device Management and Monitoring System in the Energy Sector

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Quantum Technology in Physical Layer OSI Model
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QoE-Driven Traffic Prioritization Model for XR Communication and Interaction through a Dynamically Updated Digital Twin in Private 5G Networks

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An Enhanced Colored Petri Net Framework for Dynamic Modeling of Complex Project Systems Based on DSM and DMM Models
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Personal Data in AI Regulatory Sandboxes



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Interdependence of Mobility and Incomplete Ionization Models at Cryogenic Temperatures in Si BJTs
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Impact of Traps on the Threshold Voltage Shift in Novel Buffer-Free GaN HEMTs
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Design of a Class AB Operational Amplifier for Current Signals in the Frequency Range up to 100 kHz
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High-Accuracy System for Sensing Sinusoidal Current Signal Amplitude in the Frequency Range from 1 Hz to 100 kHz
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Fiber-Optic Delay-Line for Phase Noise Measurement of Microwave Sources
3. Arnaud Mussot (Faculty of Science and Technologies, University of Lille, Villeneuve-d'Ascq, France)
Multiple Frequency Combs in Multicore High Quality Factor Fiber Fabry-Perot Resonators
4. David Vitali (University of Camerino, Italy)
Quantum Sensing and Quantum Transduction with Optomechanical Devices
5. Eric Langman (Qfactory ApS, Copenhagen, Denmark)
Phononic Crystal Electromechanics for Commercial and Not-So-Commercial Applications
6. Massimiliano Rossi (Delft University of Technology, Netherlands)
Towards Large Delocalisation of Levitated Nanoparticles

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An Update on the Optical Ground Station Design for Croatian Quantum Communication Infrastructure
2. K. Vörös, M. Kozlovsky (John von Neumann Faculty of Informatics, Budapest, Hungary)
Quantum Communication and Game Theory with Nonclassical Correlations
3. V. Anirudh Puligandla, N. Popov, T. Knežević (Division of Material Physics, Ruđer Bošković Institute, Zagreb, Croatia)
Study Of Photochromic Material-Based Weighting For Optical Neural Networks
4. K. Stojšić, V. Vujnović, S. Jurković (Medical Physics and Radiation Protection Department, University Hospital Rijeka, Croatia)
Fiber-Optic Thermometry for Fetal-Like MRI Phantoms: Design Considerations for PRFS Validation
5. N. Malivuk, I. Putnik, B. Kuzmanović, J. Bajjić, F. Mrkić, S. Cvetićanin, S. Kojić (Faculty of Technical Sciences, Novi Sad, Serbia)
Mechanical and Optical Characterization of SLA-Printed Photopolymers for Microfluidic Applications
6. A. Beena Unni, P. Velayudhan (August Chełkowski Institute of Physics, University of Silesia in Katowice, Poland), Y. Fondjo Latta Eugène (Faculty of Science and Technology, Le Mans, France), R. Mehyaoui (Faculty of Sciences and Technology, Ain-Temouchent, Algeria), K. Adrjanowicz (August Chełkowski Institute of Physics, University of Silesia in Katowice, Poland)
Substrate-Induced Modulation Of Dynamics In Vapor-Deposited Glasses

PRESENTATIONS · PREZENTACIJE

1. P. Andrekson (Chalmers University of Technology, Sweden)
Optical Phase-Sensitive Parametric Amplifiers for Optical Communication in Space
2. B. Resan, M. Zeyen (University of Applied Sciences and Arts Northwestern Switzerland, Windisch, Switzerland)
Ultra-High Resolution Optics Coherence Tomography Imaging with Low Cost Blue Diode Pumped Ti:Sapphire Laser and Axicon Lens

26.05.26. 13⁰⁰-19⁰⁰

Hall · Dvorana Camelia 1, Grand Hotel Adriatic



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PAPERS · RADOVI

1. O.Yehorchenkov, N. Yehorchenkova (SPECTRA Centre of Excellence, Comenius University in Bratislava, Slovakia)
EU Urban Transformation & Project Management: Policy Architecture, Digital Enablers and Portfolio Governance for Mission-Oriented Cities
2. F. Urem (Šibenik University of Applied Sciences, Croatia), N. Pintarić (University of Zadar, Croatia), D. Jureković (Oracle Hrvatska, Zagreb, Croatia)
Descriptive Analysis of Horizon Europe Research Projects
3. K. Pažur Aničić, B. Divjak (Faculty of Organizations and Informatics, Varaždin, Croatia)
Enhancing Self-Regulated Learning through Work-Based Learning in a Graduate IT Project Management Course
4. O. Omelianenko (Institute of Industrial Economics of National Academy of Sciences of Ukraine, Kyiv, Ukraine), V. Omelyanenko (Sumy Makarenko State Pedagogical University, Ukraine), N. Biloshkurska (Uman National University, Ukraine), V. Voronenko (Sumy State University, Ukraine), M. Biloshkurskyi (Uman National University, Ukraine)
Project Management for Enhancing Local Community Resilience and Innovation
5. S. Mansi (University of Applied Sciences Wiesbaden, Germany), I. Marović (Faculty of Civil Engineering, Rijeka, Croatia), R. Radojčić (Faculty of Mathematics, Rijeka, Croatia)
Digital Tools for Planning Railway Infrastructure – Potentials of Digital Transformation
6. I. Senegović, A. Lukenda Mlinac (VERN' University, Zagreb, Croatia), I. Labus (Croatian National Bank, Zagreb, Croatia)
Project Management Good Practices and Lessons Learned in Research, Development and Innovation Projects: Evidence from a Scientific Research Institution
7. M. Nikolova (G+D Netcetera, Skopje, North Macedonia), M. Kostoska (Faculty of Computer Science and Engineering, Skopje, North Macedonia)
Agile and Green: A Framework for Sustainable Software Delivery
8. A.M. Filipović, I. Fastić-Pajk, H. Puljiz, I. Šabić (CARNET, Zagreb, Hrvatska)
Upravljanje IT projektom Registra izdanih isprava u obrazovanju: Izazovi i višedionička suradnja velikih organizacija

26.05.26. 9⁰⁰-13⁰⁰

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Integrated Energy Storage and Social Welfare Based Auction Mechanism for Wind-Generated Electricity
2. K. Kvaternik (AVL-AST, Zagreb, Croatia), D. Pavković (Faculty of Mechanical Engineering and Naval Architecture, Zagreb, Croatia), S. Stanković (Department of Niš, Academy of Applied Technical and Preschool Studies, Serbia), M. Cipek (Faculty of Mechanical Engineering and Naval Architecture, Zagreb, Croatia), N. Faiz (M. Auezov South Kazakhstan University, Shymkent, Kazakhstan)
Droop Control System Design and Simulation Verification for a Battery Plus Supercapacitor Hybrid Power Supply
3. S. Križanić, N.Ž. Hrustek, N. Vrček (Faculty of Organization and Informatics, Varaždin, Croatia)
Comparative Analysis of Business Process Digital Twins and Simulation Models: A Case Study in Drone Production
4. M. Plenča, S. Aksentijević, A. Jugović, M. Jardas (Faculty of Maritime Studies, Rijeka, Croatia)
Smart Port Ecosystems and the Hydrogen Economy: A Case Study of Maritime Decarbonization in Split
5. V. Omelyanenko, O. Omelianenko, I. Pidorycheva (Institute of Industrial Economics of National Academy of Sciences of Ukraine, Kyiv, Ukraine), O. Prokopenko (Estonian Entrepreneurship University of Applied Sciences, Tallinn, Estonia), Y. Revtiuk (Poznan University of Technology, Poland)
Industrial Smart City Project Management
6. L. Calcich, V. Valentić, V. Kirinčić, R. Prenc (Faculty of Engineering, Rijeka, Croatia)
Digital Twin-Enabled Virtual Power Plants for Smart Energy Systems and E-Mobility Integration in Croatia
7. G. Marković (Faculty of Informatics and Digital Technologies, Rijeka, Croatia)
Cognitive Enterprise Architecture: Extending the Business Motivation Model through Temporal Knowledge Graphs and Agentic AI for Dynamic Strategic Alignment

8. M. Ilic, M. Kolarski, A. Tomčić, S. Penjivrag, M. Tošić (VizLore Labs, Novi Sad, Serbia)
Edge-Driven Orchard Analytics: Automated Treetop Detection Using YOLOv11
9. K. Topolko Herceg (Faculty of Organization and Informatics, Varaždin, Croatia)
Continuous Auditing: From Regulatory Compliance to Digital Resilience



SSE

SOFTWARE AND SYSTEMS ENGINEERING
INŽENJERSTVO SOFTVERA I SUSTAVA

EN

26.05.26. 09⁰⁰-14⁰⁰, 15⁰⁰-19⁰⁰

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WORKSHOP · RADIONICA

11¹⁵-11⁴⁵ **Human-Centred Adoption of LLMs in Industry and Society: Challenges, Opportunities, and Systemic Implications**

PAPERS · RADOVI

AI AND LARGE LANGUAGE MODELS IN SOFTWARE AND SYSTEMS ENGINEERING

1. P. Rajković, N. Stojilković (Faculty of Electronic Engineering, Niš, Serbia)
Application of RetrievalAugmented Generation Technology in Chatbot Development
2. T. Nikolova, S. Toleva-Stoimenova, S. Syarova (Department of Computer Sciences, University of Library Studies and Information Technologies, Sofia, Bulgaria)
Bug Prioritization with Large Language Models Using Ontology-Based Prompts
3. E. Smolić (It from Bit, Zagreb, Croatia), M. Brčić, L. Hobor, M. Kovač (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
AI-Assisted Unit Test Writing and Test-Driven Code Refactoring: A Case Study
4. N. Ranković (Department of Intelligent Systems, Tilburg University, Netherlands), D. Ranković (Department of Informatics, Union University, Belgrade, Serbia)
Agile Issue Triage with Transformers
5. N. Roso, M. Sužnjević, N. Markuš (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
From Games to Robotics: Unifying Human-Centered LLM Integration
6. M. Grudenić (Smart Aqua, Pula, Croatia)
Toward Assisted Engineering of Urban Water Infrastructure: A Systematic Review of Large Language Models in Urban Drainage

SOFTWARE QUALITY, PROGRAMMING PARADIGMS, AND ENGINEERING EDUCATION

1. Z. Stapić (Faculty of Organization and Informatics, Varaždin, Croatia)
From Code Smells to Curriculum Interventions: Clean Code Deficiencies in Undergraduate Software Engineering Projects
2. Á. Szauter, N. Pataki (Department of Programming Languages and Compilers, Eötvös Loránd University, Budapest, Hungary)
Rejuvenation of C++ Classes

3. L. Matovina, M. Kaluža (Business Department, Polytechnic of Rijeka, Croatia)
CodeFirst or DatabaseFirst
4. Z. Sirotić (ISTRA TECH, Pula, Croatia), S. Sovilj, D. Fonović (Faculty of Engineering, Pula, Croatia), K. Pripuzić (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Comparison of Multiple Inheritance in Seven Object-Oriented Programming Languages
5. M. Benkus, L. Masnec, Z. Stapić (Faculty of Organization and Informatics, Varaždin, Croatia)
AI Inside the Classroom: A Modern Approach to Teaching AI Skills with Azure and Multi-Agent Concepts
6. A. Lokner Lađević, D. Delija, G. Sirovatka, M. Žagar (Zagreb University of Applied Sciences, Croatia)
Automating Filesystem Artifact Analysis in Linux Environments Using Python

ARCHITECTURES, INTEGRATION, AND LIFECYCLE MANAGEMENT OF COMPLEX SYSTEMS

1. I. Iliev, K. Rasheva-Yordanova, D. Borissova (Department of Information Sciences, University of Library Studies and Information Technologies, Sofia, Bulgaria)
An Integrated Model for Optimizing International Postal Addressing and Delivery Services
2. J. Matkovic (Faculty of Mechanical Engineering, Computing and Electrical Engineering, Mostar, Bosnia and Herzegovina)
BPMN-Based Visualization of Microservices Choreography Implemented Using Message-Broker Infrastructure
3. L. Borozan, B. Borozan, D. Ševerdija (School of Applied Mathematics and Informatics, Osijek, Croatia)
Efficient Checkpointing via Object Serialization in C# Applications
4. A. Baumgartner, Č. Livada, T. Galba (Faculty of Electrical Engineering, Computer Science and Information Technology Osijek, Croatia)
Engineering and Deploying the HoloDent3D Software System under Real-World Constraints
5. V. Kokalanov, N. Stojković, A. Stojanova Ilievska, I. Ristov (Faculty of Computer Science and Engineering, Stip, North Macedonia)
Designing an Application for Photo Sketching
6. A. Daskalov, A. Kulakov (Faculty of Computer Science and Engineering, Skopje, North Macedonia), I.M. Pires (the Águeda School of Technology and Management, Universidade de Aveiro, Portugal), S. Panev (Faculty of Computer Science, Sv. Nikole, North Macedonia), E. Zdravevski (Faculty of Computer Science and Engineering, Skopje, North Macedonia)
Evaluation of Algorithms for Data-Driven Recommendation Systems

SECURITY, RELIABILITY, AND EMBEDDED & DISTRIBUTED SYSTEMS

1. S. Petrović, M. Tomić (Faculty of Engineering, Rijeka, Croatia)
Network Protection with Next Generation Firewalls
2. D. Sindičić, N. Momčilović (APIS IT, Zagreb, Croatia)
Detecting Remote Code Execution Attacks in a Kubernetes Cluster Using the Autoencoder
3. L. Lamani, E. Leka, G. Rexha (Polytechnic University of Tirana, Albania), A. Aliti (Mother Teresa University, Skopje, North Macedonia)
A Secure and Resilient Framework for Wildfire Management via UAVs and Blockchain Federated Learning
4. F. Krapić, M. Tomić (Faculty of Engineering, Rijeka, Croatia)
Fitness Tracker Connected to the Internet Using a Wi-Fi Network
5. K. Paić, M. Tomić (Faculty of Engineering, Rijeka, Croatia)
GNSS Tracking on the nRF7002 DK
6. I. Ljubi, M. Vuković (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Representation Analysis of croBERT for Croatian Disinformation Detection

26.05.26. 09⁰⁰-13⁰⁰, 15⁰⁰-19⁰⁰

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PAPERS · RADOVI

1. K. Petrinić, T. Špoljarić, B. Peša, G. Malčić (Zagreb University of Applied Sciences, Croatia)
Automation of a Pumpkin Seeds' Drying Process
2. P. Komljenović, B. Vuletić Komljen, N. Šare, S. Jelčić (Department of Electrical Engineering, Zagreb University of Applied Sciences, Croatia)
Design and Development of a Compact Keyboard with 8 Keys and a Rotary Encoder
3. D. Kokanović, B. Vuletić Komljen, N. Šare, G. Malčić (Department of Electrical Engineering, Zagreb University of Applied Sciences, Croatia)
Simulation of an Electric Vehicle (EV) Charger with Dynamic Charging Power Allocation
4. T. Akkurt Eroğlu, H. Apaydin (Graduate School of Natural and Applied Sciences, Ankara University, Turkey)
Multistep-Ahead Forecasting of Drought Using Neural Prophet and Facebook Prophet Artificial Neural Network Models: Beyşehir Lake Basin Case
5. J. Franjković, M. Horvat, M. Delimar (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Identification of Emerging Viral News Topics Using HDBSCAN Outlier Projection
6. I. Ahmad (Leonardo da Vinci Telematic University, Chieti, Italy), A. Amelio (University of Chieti-Pescara, Pescara, Italy), M. Aracne (Leonardo da Vinci Telematic University, Chieti, Italy), L. Caroprese, E.Z. Gill, C. Morbidoni (University of Chieti-Pescara, Pescara, Italy)
Technologies, Applications, and Challenges of Large Language Models
7. S. Petković, I. Črnjak, S. Zentner Pilinsky (Department of Electrical Engineering, Zagreb University of Applied Sciences, Croatia)
Desktop Application for Processing 4G and 5G Mobile Network Radio Parameters
8. H. Ivančić, M. Šagovac, A. Novalić, F. Blažević, E. Vuran, D. Potoč, T. Jaguš (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Adaptive Task Difficulty Adjustment in Primary Mathematics Education Using Interpretable Machine Learning
9. A. Dergez, V. Zuppa Bakša, A. Bednjanec (Zagreb University of Applied Sciences, Croatia)
Battery Systems of Large Capacity in Power Systems
10. M. Muđer, A. Bednjanec, V. Zuppa Bakša (Zagreb University of Applied Sciences, Croatia)
Quality Management in the Automotive Industry
11. Z. Bošković Gobo, S. Gaši, M. Todorčić, K. Marasović, A. Mutka (Rochester Institute of Technology Croatia, Zagreb, Croatia)
The Making of RITGPT - A University AI Assistant with RAG and APIs
12. V. Valentić, L. Calcich, A. Bendra, A. Višković (Faculty of Engineering, Rijeka, Croatia)
Territorial Voltage Management Using a Technical Virtual Power Plant
13. P. Lončar (Faculty of Electrical Engineering and Computing, Zagreb, Croatia), F. Grebenar, A. Jukić, A. Kekelj, D. Sabolić (HOPS, Zagreb, Croatia)
Impact of Increasing Distributed Generation on the Accuracy of Transmission Congestion Forecasts
14. T. Špoljarić, E. Čižmak, J. Kordek, K. Martinčić (Zagreb University of Applied Sciences, Croatia)
Development and Implementation of PWM Control Device for Laboratory Observation of Control Possibilities in Automation Education

15. M. Milenković, L. Pacea, E. Rožić (Faculty of Transport and Traffic Sciences, Zagreb, Croatia)
Automated Traffic Surveillance and Oversight: Legal Limits of Personal Data Processing by Public Authorities in the Republic of Croatia
16. I. Veličković, A. Drobňjak (Faculty of Electrical Engineering and Computing, Zagreb, Croatia), L. Jakić (LAFCO TECH, Zagreb, Croatia), T. Rajnović, I. Botički (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Mixed Reality – An Exploration of Practical Capabilities and Constraints
17. F. Buhiniček, A. Drobňjak, I. Botički (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Design and Evaluation of a Local LLM-Based Architecture for Intelligent Educational Applications
18. Ž. Trzun, S. Morić (Department of Electrical Engineering, Zagreb University of Applied Sciences, Croatia)
Sustainability of Mobile Core Architecture Development
19. J. Simon, G. Sirovatka (Zagreb University of Applied Sciences, Croatia), I. Branica (Locus, Zagreb, Croatia), M. Žagar (Zagreb University of Applied Sciences, Croatia)
Identification of Optimal Intrusion Path via Graph-Based Cost Modeling and Dijkstra's Algorithm
20. V. Bilogrević, A. Bednjanec, A. Kiričenko (Zagreb University of Applied Sciences, Croatia)
An ISO/IEC 27001-Oriented Approach to Quality Management in the Computing Sub-Sector
21. M. Šoljić, P. Lončar, L. Malarić, F. Čopčić, D. Brozović (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
Enhancing Power System Reliability through N-1 Contingency Analysis, EMS, and Load Forecasting
22. I. Vrhovec, A. Domitrović, K. Krajček Nikolić, D. Gerhardinger (Faculty of Transport and Traffic Sciences, Zagreb, Croatia)
Mission-Level Endurance and Payload Benefits of a Series-Hybrid Multicopter UAV
23. A. Dundov, M. Šimatović, D. Beronić, B. Mihaljević (Rochester Institute of Technology Croatia, Zagreb/Dubrovnik, Croatia), A. Radovan (Algebra Bernays University, Zagreb, Croatia)
Evaluating Java Virtual Threads for Concurrent Spring Boot and Helidon Services
24. M. Šimatović, D. Beronić, B. Mihaljević, A. Dundov (Rochester Institute of Technology Croatia, Zagreb/Dubrovnik, Croatia), A. Radovan (Algebra Bernays University, Zagreb, Croatia)
Memory Constraints and Scalability of Concurrent Java Applications with Virtual Threads
25. A. Radovan, A. Klasić, D. Bele (Algebra Bernays University, Zagreb, Croatia), B. Mihaljević (Rochester Institute of Technology Croatia, Zagreb, Croatia)
AI-Driven Learning Platform with Gamification for K-12 Students
26. T. Saneva, M. Stojcheva (Faculty of Computer Science and Engineering, Skopje, North Macedonia), J. Prodanova, A. Dedinec (Macedonian Academy of Sciences and Arts, Skopje, North Macedonia), A. Dedinec (Faculty of Computer Science and Engineering, Skopje, North Macedonia)
Analyzing Media Narratives on Renewable Energy in Romania Using Sentiment Analysis and Topic Modeling
27. K. Stefanova, M. Stojcheva, A. Dedinec (Faculty of Computer Science and Engineering, Skopje, North Macedonia), J. Prodanova (Macedonian Academy of Sciences and Arts, Skopje, North Macedonia)
Comparing Waste Management X Posts from Spain and Macedonia Using GPT and BERT Models
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Comparison of Knowledge Transfer Methods for Bias Neutralization in Text
29. F. Alaber, B. Novoselnik (Faculty of Electrical Engineering and Computing, Zagreb, Croatia)
An Integrated IoT Weather Station for Continuous Environmental Sensing and Analytics

08. EXHIBITION IZLOŽBA



Exhibition of equipment, services, technical and technological solutions
Izložba opreme, usluga i tehničko-tehnoloških rješenja

- 1 AI FACTORY AND ANTENNA**
 - Poster sekcija
- 2 MARETON, Zagreb**
 - Modularni sustav neprekidnog napajanja naponom 110 VDC, serija IBN 110
 - Modularni sustav neprekidnog napajanja naponom 220 VDC, serija IBN 220
 - Ispravljači-punjači serije PBR, 24 i 28 VDC
 - Modularni ispravljački sustav, serija MPLP i MPL, 48V, 110 VDC i 220 VDC
 - Pretvarač signala RS u OPTO, zvjezdasta spojka, serija ZSK
- 3 CROCCS Hrvatski centar kompetentnosti za poluvodiče, Zagreb**
 - Predstavljanje CROCCS-a potencijalnim korisnicima. Fokus djelovanja CROCCS-a je malo i srednje poduzetništvo u području elektronike s naglaskom na inovacije, razvoj novih čipova i visokotehnološke proizvode.
- 4 HRVATSKA ZAJEDNICA INOVATORA, Zagreb**
 - Predstavljanje Hrvatske zajednice inovatora
- 5 HR HPC CC Hrvatski centar kompetencija za HPC, Srce Zagreb i NCC SLING Slovenski nacionalni kompetenčni center SLING, Fakulteta za strojništvo, Ljubljana**
 - Zajednički štand slovenskog i hrvatskog HPC centra kompetencija: plakati, brošure, promidžbeni materijal i konzultacije uživo. Video prezentacije na promotivnim ekranima.
- 6 MJERNE TEHNOLOGIJE, Zagreb**
 - Mjerni instrumenti i rješenja renomiranih proizvođača: Keysight Technologies, EXFO, TEMS, ETS-Lindgren, Ixia, VeEX, CUBRO, Sumitomo, Softing, ELEKTRONIKA, TraceSpan, albedo
- 7 IEEE**
 - Promotivni materijal
- 8 DRUŠTVO KIBERNETIČARA RIJEKA**
 - Izložba dječjih upita i crteža na temu „Što bi ti pitao/pitala računalo?“
- 9 MULTISTEM - Promocija STEM tehnologija multidisciplinarnim pristupom, MIPRO i partneri**
 - Cilj projekta je jačanje kapaciteta udruga te razvijanje održivih programa koji povećavaju interes za STEM područja među učenicima na području Republike Hrvatske, s naglaskom na otkrivanje, praćenje i usmjeravanje talenata, kao i na povećanje rodne ravnopravnosti.

HOTEL	HALL / DVORANA	25.05. MONDAY / PONEDELJAK		26.05. TUESDAY / UTORAK		27.05. WEDNESDAY / SRIJEDA		28.05. THURSDAY / ČETVRTAK		29.05. FRIDAY / PETAK	
		A.M. / DOPODNE	P.M. / POPODNE	A.M. / DOPODNE	P.M. / POPODNE	A.M. / DOPODNE	P.M. / POPODNE	A.M. / DOPODNE	P.M. / POPODNE	A.M. / DOPODNE	P.M. / POPODNE
GRAND HOTEL ADRIATIC	CONGRESS HALL KONGRESNA DVORANA	10,00-13,00 CE	15,00-19,00 CE	09,00-12,00 CE 12,00-13,00 MULTI-STEM	15,00-18,00 CE	10,00-13,00 OPENING CEREMONY Vehicles in the EU	15,00-19,00 Gospodarski AI i HPC forum	09,00-13,00 CE	15,00-19,00 CE	09,00-13,00 CE	
		10,00-13,30 CCE	14,00-17,00 CCE	10,00-13,00 CCE	14,00-17,00 CCE		16,00-19,00 BIS-BDP	08,00-13,00 HCI			
			09,00-12,00 NEST4WB	13,00-19,00 PM	15,00-19,00 CE	15,00-19,00 CE	09,00-13,00 SLAIF	15,00-19,00 DS-BE	09,00-13,00 DS-BE		
			09,00-12,00 IRP-ZT	14,00-17,00 IRP-ZT	10,00-12,30 HEP	13,30-15,30 HEP	16,00-19,00 CRO-IGF	09,00-13,00 AIS	15,00-19,00 AIS	09,00-13,00 AIS	15,00-17,00 AIS
	FORTUNA					20,00-22,00 COCKTAIL					
HOTEL ADMIRAL	NAVA 1			09,00-13,00 SIDE	15,00-19,00 OPEL		15,00-19,00 OPEL	09,00-13,00 ICTLAW			
	NAVA 2			09,00-13,00 SP	15,00-19,00 SP		15,00-19,00 CIS	09,00-13,00 DE-DS	15,00-19,00 DE-DS		
	LIBURNA			09,00-14,00 SSE	15,00-19,00 SSE			09,00-13,00 MEET	15,00-19,00 MEET		
	GALLIA			09,00-13,00 CTI	15,00-19,00 CTI			09,00-13,00 EE	15,00-19,00 EE		
	LEUTI							09,00-13,00 DC-CPS	15,00-19,00 DC-CPS		

GENERAL EVENTS
ZAJELNIŠKE AKTIVNOSTI

FORUM
FORUM

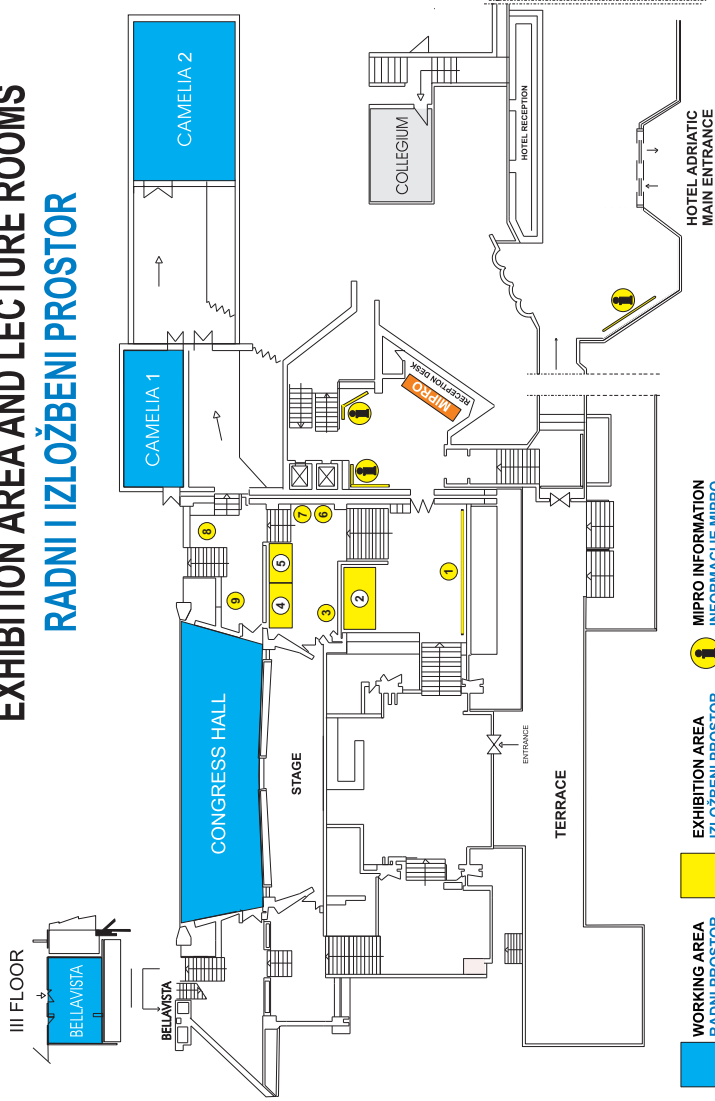
PANEL & PROJECTS
PANELI I PROJEKTI

WORKSHOP
RADIONICA

TUTORIALS
SEMINARI

CONFERENCES
SAVJETOVANJA

EXHIBITION AREA AND LECTURE ROOMS RADNI I IZLOŽBENI PROSTOR

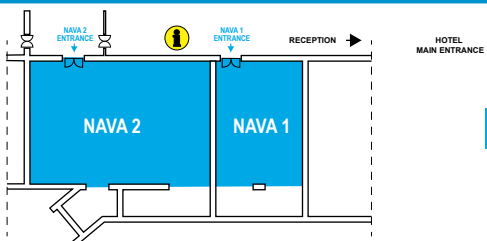


EXHIBITORS • IZLAGAČI

- 1 AI Factory and Antenna Poster Exhibition
- 2 MARETON, Zagreb
- 3 CROCCS - Hrvatski centar kompetentnosti za poluvodiče, Zagreb
- 4 Hrvatska zajednica inovatora, Zagreb
- 5 HR HPC CC Hrvatski centar kompetencija za HPC, Sroc Zagreb i NCC SLING Slovenski nacionalni kompetenčni center SLJING, Fakulteta za strojništvo, Ljubljana
- 6 Mjerne tehnologije, Zagreb
- 7 IEEE
- 8 Društvo kibernetičara, Rijeka
- 9 MULTISTEM - Promocija STEM tehnologija multidisciplinarnim pristupom, MIPRO i partneri

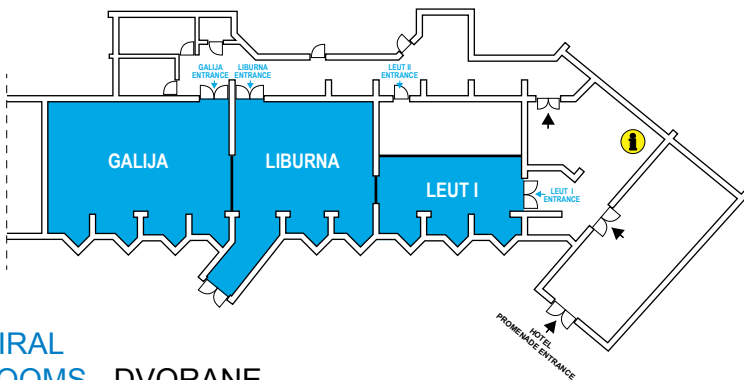
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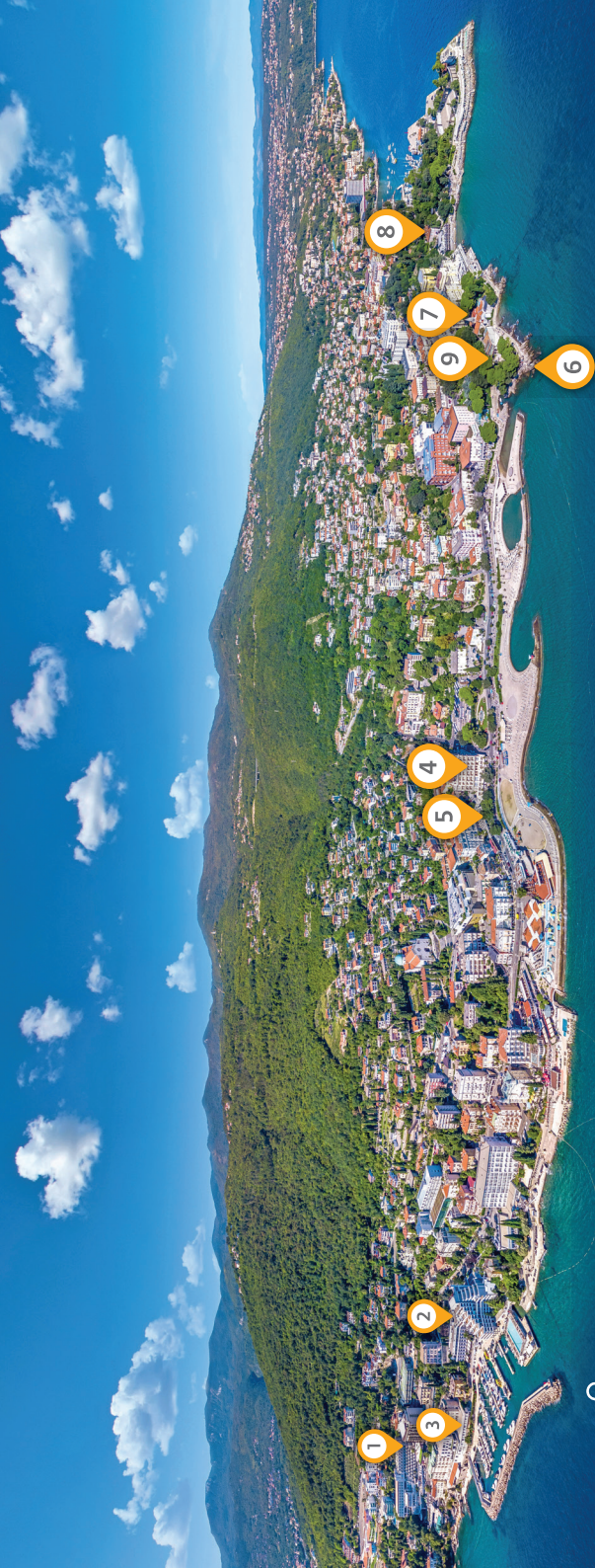


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„Najviše korisnika“ se odnosi na ukupan broj izvršenih promjena operatora (prijenosa broja) u pokretnoj mreži na tržištu Republike Hrvatske u razdoblju od siječnja 2025. do prosinca 2025. g.



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