2. odprti dan za gospodarstvo

SLAIF
Slovenska tovarna UI
Slovenian AI Factory

Program izobraževanj in dogodkov SLAIF

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Univerza v Mariboru

Fakulteta za elektrotehniko, računalništvo in informatiko

10. April 2026

Glavni cilji

Razvoj talentov na področju UI:

- Novi/posodobljeni študijski programi
- Prilagojena izobraževanja & razvoj kompetenc glede na potrebe na trgu (podjetja, državna uprava, študenti, raziskovalci…)

Večja vključenost (predvsem MSP):

- Uporaba UI z manjšimi stroški

Promocija:

- Uporaba HPC za neakademske deležnike, Hekatoni, mini-MOOC platforma“ (OrangeWeb), Povezovanje z zainteresiranimi združenji in organizacijami

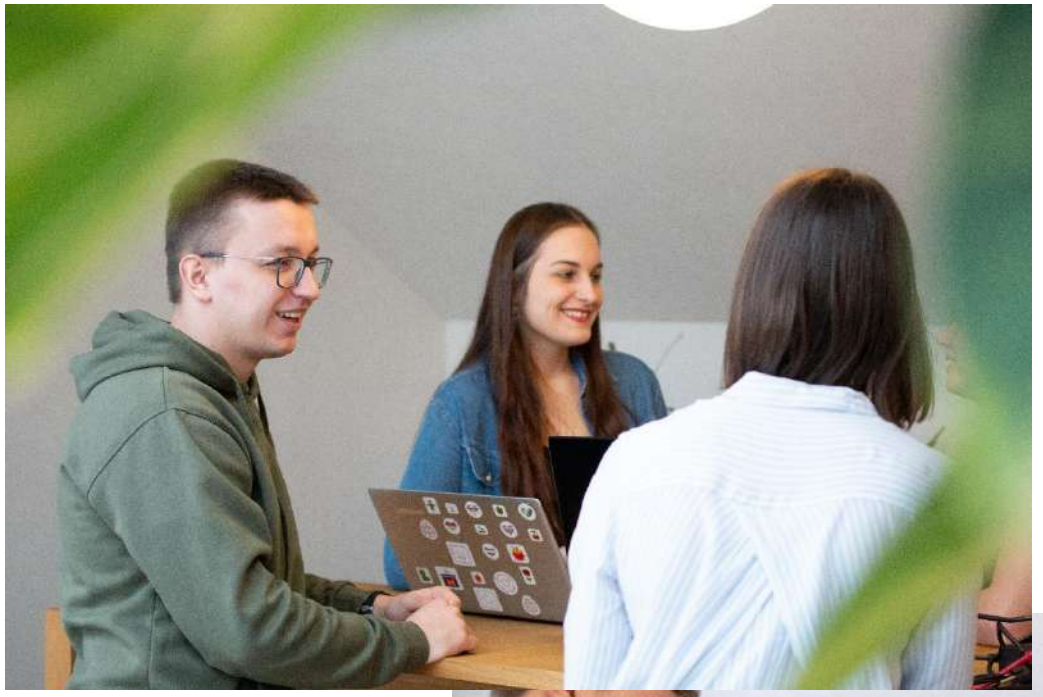
Sodelovalni prostori - „one-stop shop“

- **Lokacije:** UL, IJS, UM, FIŠ
- Tehnična podpora uporabnikom UI
- Demokratizacija uporabe HPC
- Industrijski deležniki:
  a) UI-razvojna podjetja
  b) Integratorji
  c) Končni uporabniki




Tipi izobraževanj

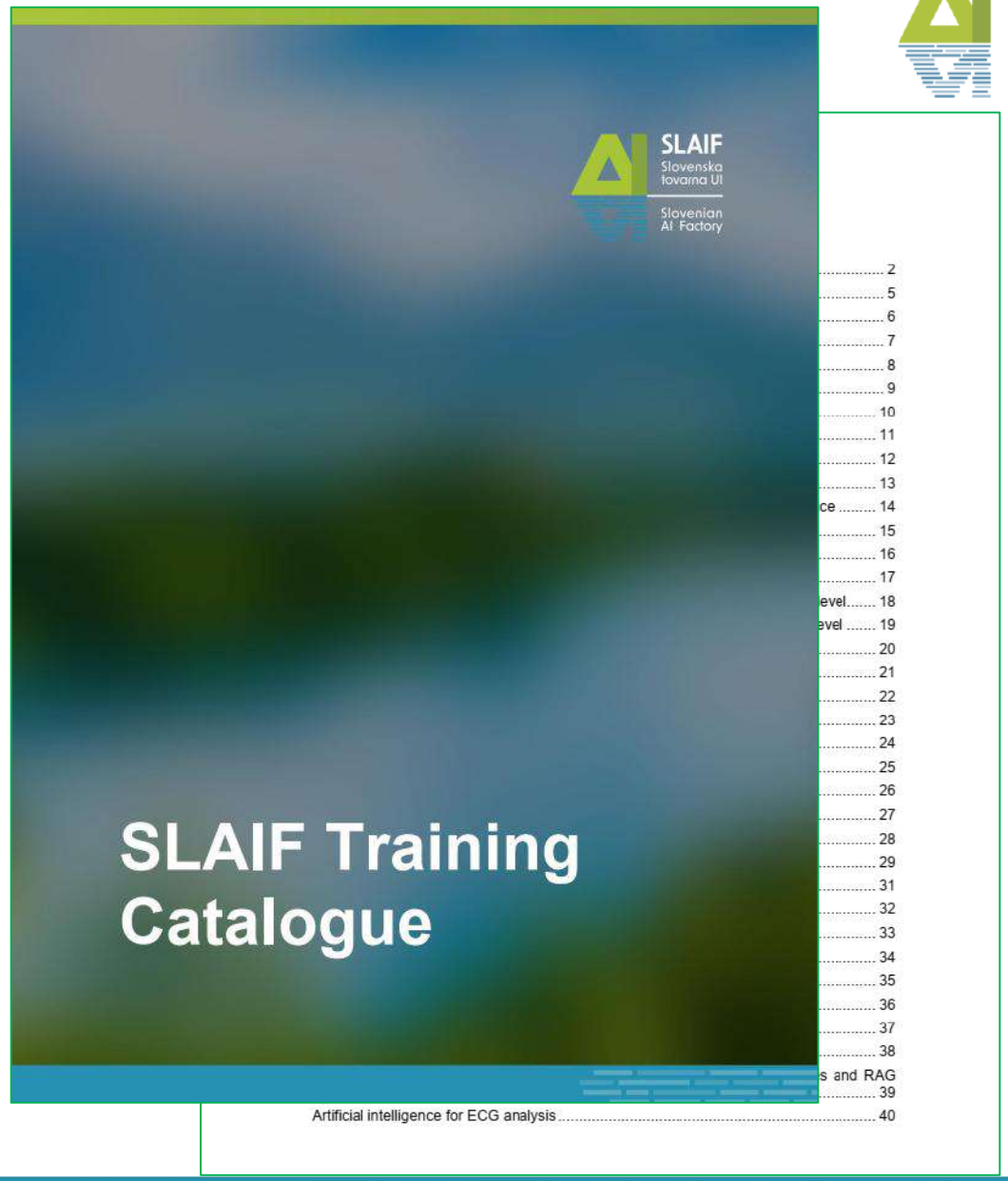
- Webinar/predavanje *(1h)*
- Izobraževanje/delavnica
  - Kratka *(2h)*
  - Srednja *(4h)*
  - Daljša *(8h+)*
- Posvet *(pol dneva)*
- Konzultacije „Ena-na-ena“
- Mikrodokazila:
  - 1 ECTS 25-30h dela za slušatelje (predavanja, domače delo, delavnica, učenje, preverjanje znanja)



Vsebine izobraževanj

https://edu.slaif.si/

- **UI v podjetjih & MSP**
  - strategija, uvajanje, konkurenčnost, tveganja
- **HPC & digitalna infrastrukturna podpora za UI**
  - uporaba HPC, paralelno procesiranje, delotoki
- **Napredni modeli UI**
  - VJM in jedrni modeli, *RAG*, *AutoML*, optimizacija
- **Računalniški vid & večmodalni sistemi**
  - senzorski sistemi, učenje večmodalnih modelov
- **Etika, varnost, zasebnost in zanesljiva UI**
  - Akt o UI, skladnost z zakonodajo, varstvo osebnih podatkov



Mikrodokazila

When artificial intelligence meets supercomputers

Course provider:
University of Ljubljana, Faculty of Computer and Information Science (UL FRI)

Containerization and orchestration of applications

Course provider:
University of Ljubljana, Faculty of Computer and Information Science (UL FRI)
Instructors:

Optimization and fine-tuning of machine learning models

Course provider:
University of Maribor, Faculty of Electrical Engineering and Computer Science (UM FERI)
Instructors:
Vili Podgorelec (UM FERI), Grega Vrbančič (UM FERI), Iztok Fister (UM FERI), Lucija Brezočnik (UM FERI)

Learning objectives: The goal of the course is to enable participants to solve real-world problems using machine learning methods, with an emphasis on optimizing the entire machine learning process.

Content: Effective use and optimization of existing artificial intelligence and machine learning algorithms and tools - from data preparation and feature design to model selection, hyperparameter tuning and evaluation. Achieving the best performance for a given problem. Optimization of machine learning models for analyzing and predicting environmental data.

Learning outcomes: Participants will learn approaches and methods for optimizing predictive machine learning models that can be used in different phases of the entire machine learning process.

Prerequisites: basic understanding of machine learning

Target audience: IT professionals in companies, domain experts and business users, decision makers with a technical background

Language: Slovenian
Tentative date: Spring 2027
Venue: UM FERI
Format: Lectures; Hands-on sessions; Home assignments; Case studies
Duration: Contact hours: 12h, Independent work: 18h
No. of ECTS credits: 1

Introduction to AI and machine learning – solving complex tasks with AI & ML

Course provider:
University of Maribor, Faculty of Electrical Engineering and Computer Science (UM FERI)
Instructors:

AI-based processing of electrophysiologic and kinesiologic data – Beginner's level

Course provider:
University of Maribor, Faculty of Electrical Engineering and Computer Science (UM FERI)

AI and machine learning engineering

Course provider:
University of Maribor, Faculty of Electrical Engineering and Computer Science (UM FERI)
Instructors:
Grega Vrbančič (UM FERI), Vili Podgorelec (UM FERI), Benjamin Petelinek (UM FERI)

Learning objectives: The goal of the training is to introduce participants to an engineering approach to developing, deploying, and maintaining intelligent systems that incorporate artificial intelligence and machine learning models, and the key benefits of such an approach.

Content: Concepts, tools, and best practices for developing and engineering intelligent systems. The full lifecycle of AI and machine learning solutions, including system design, model development, deployment, monitoring, and maintenance, with a special focus on MLOps principles such as automation, reproducibility, scalability, and reliability of ML systems in production environments.

Learning outcomes: Participants will understand the key challenges in developing, deploying, and maintaining intelligent systems in production environments.

Prerequisites: programming knowledge (python), knowledge of software development, basic knowledge of machine learning

Target audience: IT professionals in companies, developers of intelligent systems

Language: Slovenian
Tentative date: Fall 2027
Venue: UM FERI
Format: Lectures; Hands-on sessions; Home assignments; Case studies
Duration: Contact hours: 12h, Independent work: 18h
No. of ECTS credits: 1

Data engineering & MLOps/AIOps

Course provider:
University of Ljubljana, Faculty of Computer and Information Science (UL FRI)

Hands on machine learning

Course provider:
University of Nova Gorica (UNG)

From exploratory data analysis to changing business processes using AI

Course provider:
University of Ljubljana, Faculty of Computer and Information Science (UL FRI)
Instructors:
Slavko Žitnik (UL FRI), Timotej Knez (UL FRI), Miha Malenšek (UL FRI)

Learning objectives: Understand the transition from exploratory data analysis (EDA) to production-grade AI in business processes. Connect data-driven insights with decision-making and business process transformation. Use modern AI frameworks and large language models (LLMs) to support analysis, automation, and decision-making. Assess when and how AI can meaningfully transform existing workflows. Address organizational, technical, and ethical challenges of deploying AI in business environments.

Course content: Candidates will get to know how to get from a research analysis to business insights (exploratory data analysis, hypothesis generation, visualization, interpretation), link data to business processes (identifying processes where AI adds value, measurable impact, KPIs), use LLMs for analysis and decision support (use cases of models such as ChatGPT, Gemini, GaMS, and related LLMs for text analysis, summarization, decision support, and user interaction), use frameworks for building AI-powered solutions (use of frameworks such as LangChain and similar tools to connect models, data sources, tools, and business logic), how to come from a prototype to a process change (integration of AI solutions into existing IT systems, task automation, human-in-the-loop approaches, change management), and get to know risks, limitations, and responsible AI (result reliability, explainability, organizational readiness, compliance, and ethical considerations).

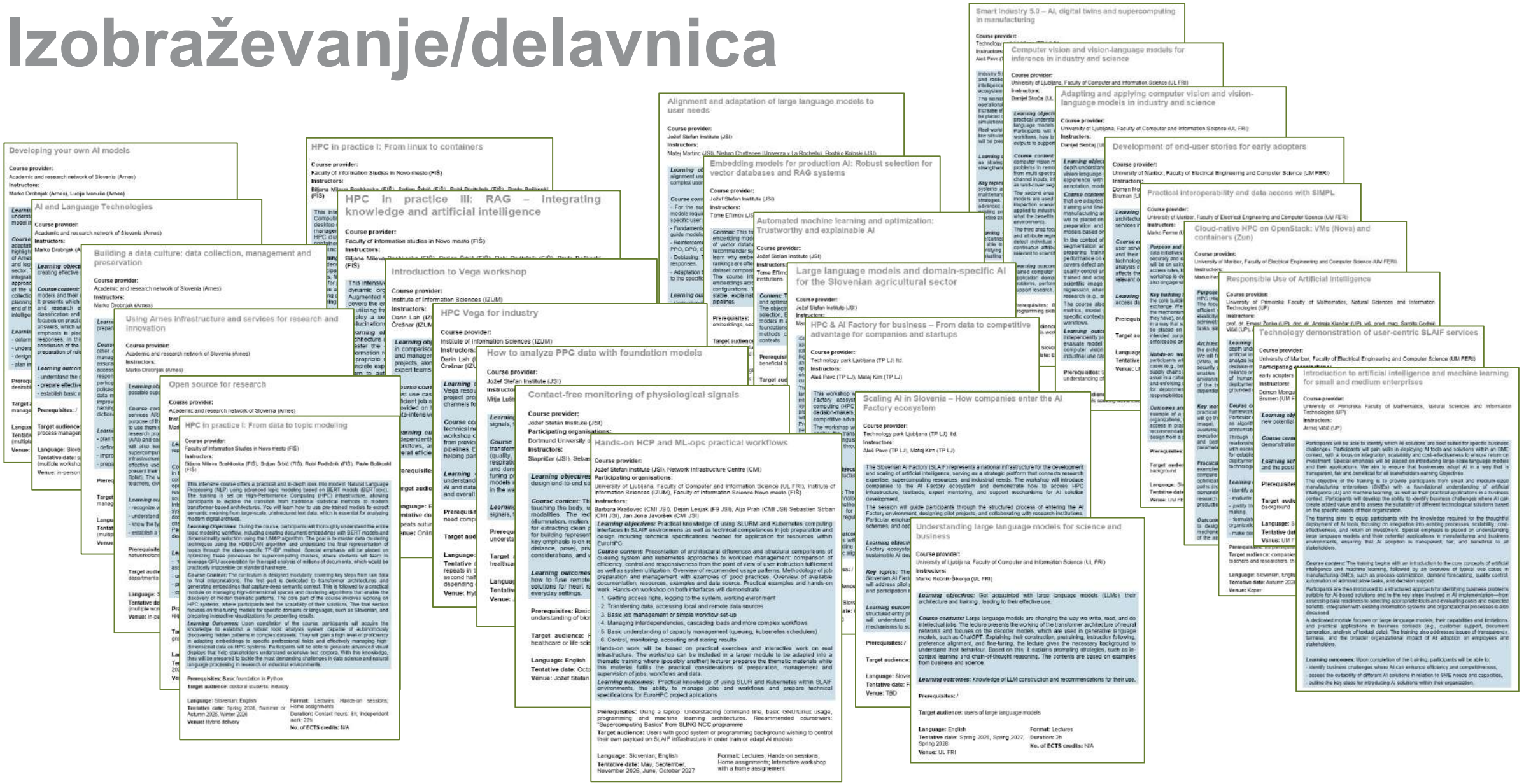
Learning outcomes: By the end of the training, candidates will have learned to perform exploratory data analysis and link results to concrete business questions, identify business processes suitable for AI-enabled support or transformation, apply LLMs and AI frameworks to support analysis, decision-making, and automation, plan the transition from experimental AI solutions to changes in business processes, critically evaluate the impact of AI on organizations, employees, and business performance.

Prerequisites: /

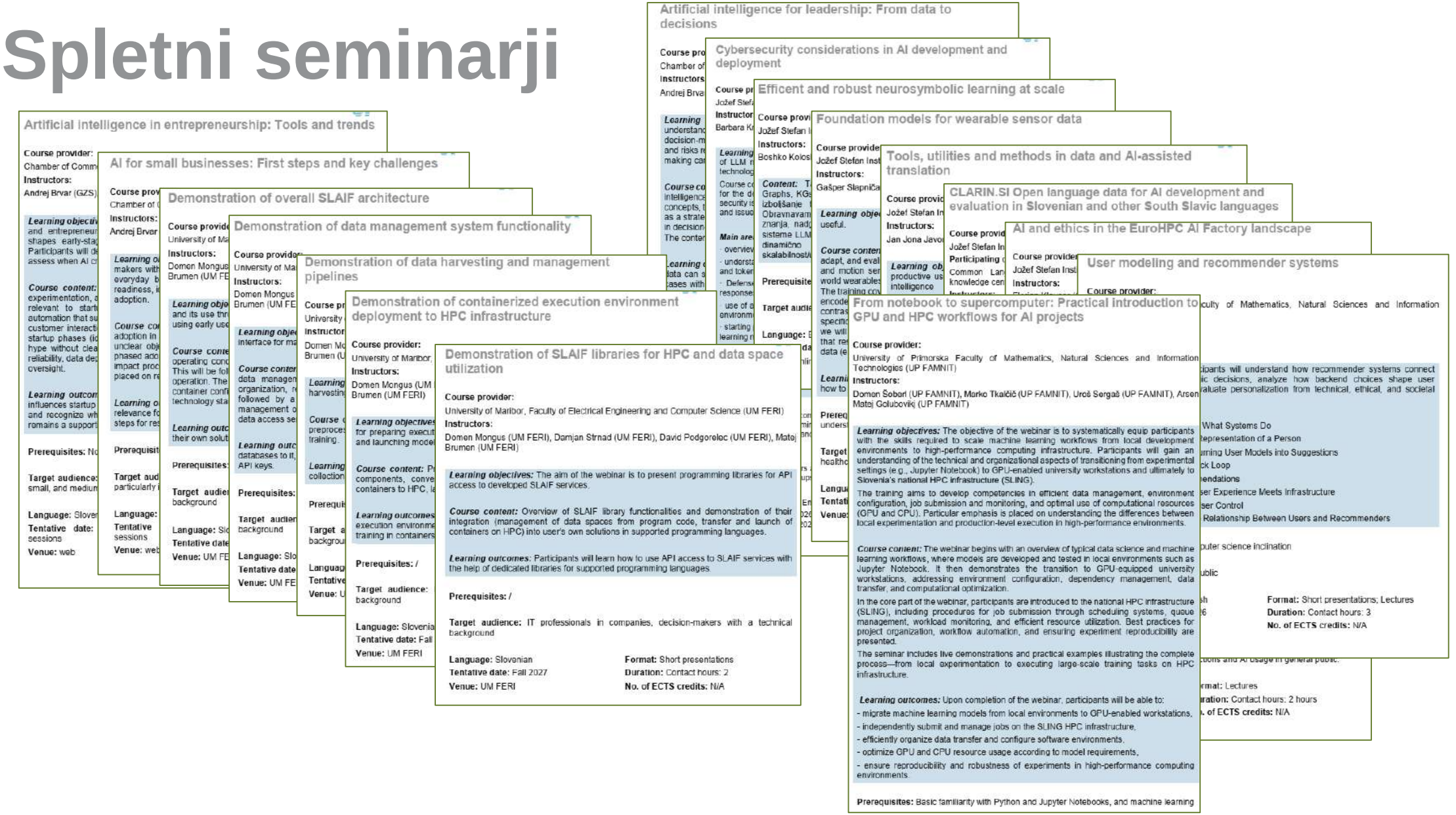
Target audience: Team leads, Chief Information Officers

Language: Slovenian, English
Tentative date: Fall 2027, Summer 2028
Venue: UL FRI
Format: Lectures; Hands-on sessions; Home assignments
Duration: Contact hours: 16h, Independent work: 32h
No. of ECTS credits: 2

Izobraževanje/delavnica



Spletni seminarji



Krepitev prepoznavnosti:

- **Osrednja spletna stran in integrirani servisni portal:** https://www.slaif.si/
- **Družbena omrežja:**
  - Istagram: slovenian.aif
  - LinkedIn: Slovenian AI Factory - SLAIF
  - facebook: Slovenian AI Factory - SLAIF

slovenian.aif

Slovenian AI Factory - SLAIF
249 followers
1w •

AI Factory
Slovenian AI Factory - SLAIF
sledilci: 22 • Sledi: 13

- **Javno komuniciranje:** izjave, intervjuji, spletni seminarji, seminarji in podkasti
- **Namenske publikacije:** bele knjige, študije primerov in poudarki raziskav za prikaz vpliva SLAIF
- **Hakatoni in tekmovanja:** https://hackathon.si/
- **Konference in industrijski forumi**
- **Novičniki…**

Nacionalno in mednarodno sodelovanje

- **SLING, NCC, DIH-i in SRIP-i:** usklajevanje aktivnosti skupnosti z dejavnostmi SLAIF za zagotavljanje sodelovanja in širše uporabe med uporabniki
- **Nacionalni kompetenčni center za umetno inteligenco (AI CC)**
- **Sodelovanje v Evropskih omrežjih Tovarn UI (AI Factory)**
- **Mednarodne publikacije in skupni raziskovalni projekti**
- **Aktivna udeležba ter promocija dejavnosti SLAIF na dogodkih EuroHPC** (EuroHPC Summit, ASHPC, AIME, ISC High Performance, EuroHPC User Days, SLING Days, ETP4HPC, ITIS …)
- **Kartiranje relevantnih evropskih partnerjev in pobud na področju UI (EuroHPC, EGI, EOSC)**
- **Konsolidacija evropskih primerjalnih meril (benchmarkov):** Vseevropska delovna skupina za konsolidacijo jezikovnih in kulturnih okvirjev za primerjalno vrednotenje
- **Spodbujanje uporabe v mednarodnih projektih:** SLAIF bo izvajal aktivnosti za mednarodno povezovanje, vključno z vzpostavljanjem povezav s sosednjimi in drugimi zainteresiranimi državami (npr. Avstrija, Španija)
- **Sodelovanje v strateških mednarodnih telesih in organizacijah**

Vključevanje skupnosti

- **Dogodki za skupnost v večjih mestih**, z začetkom v mestu Maribor.
- **Komunikacijski dogodki:** izvedba vsaj treh dogodkov za širšo javnost:
  - Etika, umetna inteligenca v vsakdanjem življenju,
  - Vpliv umetne inteligence na pomembne nacionalne prioritete...
- **Ciljno vključevanje skupnosti v šolah in visokem šolstvu**
- **Ciljno vključevanje skupnosti MSP in tehnoloških zagonskih podjetij**, s poudarkom na praktični uporabi UI ter konkretnih zgledih**.**
- **Regionalni dogodki za lokalne skupnosti:** več regionalnih dogodkov za razširitev dosega aktivnosti.

Hvala za udeležbo!

Thank you for attending!

SLAIF
Slovenska tovarna UI
Slovenian AI Factory

IZUM
Institute of Information Science, Maribor, Slovenia

arnes

University of Maribor

Univerza v Novi Gorici

Gospodarska zbornica Slovenije
Chamber of Commerce and Industry of Slovenia

Jožef Stefan Institute
Ljubljana, Slovenia

UNIVERZA V LJUBLJANI
University of Ljubljana

FIS Fakulteta za informacijske študije
Faculty of information studies

Univerza na Primorskem

TP LJ01

Financerja / Financed by:

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA VISOKO ŠOLSTVO, ZNANOST IN INOVACIJE

EuroHPC Joint Undertaking

Projekt SLAIF: Slovenska tovarna umetne inteligence je finančno podprlo Ministrstvo za visoko šolstvo, znanost in inovacije. Projekt je bil na razpisu skupnega podjetja EuroHPC izbran za financiranje v okviru programov Obzorje Evropa ter Digitalna Evropa.

SLAIF: Slovenian AI Factory has been funded by the Ministry of Higher Education, Science and Innovation of Republic of Slovenia. At a call by EuroHPC JU, the project has received a positive funding decision under Horizon Europe and Digital Europe Programmes.