



Partner search

Date 11/08/2025

(*) – Mandatory

- (*) Relevant topic(s) in work programme (code & name of the topic(s) line(s))

HORIZON-CL3-2025-02-CS-ECCC-01
Generative AI for Cybersecurity applications

- Offering/ requesting expertise; interest in coordination/ project partner role; brief description of the project concept, if relevant

Looking to join a consortium as a project partner and offering expertise.

- (*) Description of the expertise requested/offered (up to 1000 characters)

With 238 researchers, 50 skilled technicians, and over 2,500 students, the Faculty of Electrical Engineering and Computer Science (UM FERI) is one of South-Eastern Europe's leading institutions for education, research, and innovation in electrical engineering, computer science, and related fields. Its 14 research groups span energy engineering, systems and cybernetics, computer science and informatics, electric devices, and metrology. UM FERI has a strong track record in coordinating and delivering high-impact R&I projects, currently engaged in 67+ international projects funded by Horizon Europe, H2020, Digital Europe, EDF, Interreg, Erasmus+, EuraMET, NATO, and the US Navy, as well as 22 national projects funded by the Slovenian Research and Innovation Agency. Additionally, it delivers 50+ industrial projects with global partners, translating cutting-edge research into practical, market-ready solutions.

We have expertise in the area of applied cryptography, managing digital identities and authentication, AI for cybersecurity, threat analysis, cybersecurity training and education, and cybersecurity governance.

We have been involved in two of the four H2020 pilot projects for establishing and managing the operation of the European network of cybersecurity competence centres, CyberSec4Europe (Cybersecurity for Europe) and CONCORDIA (Cyber Security Competence for Research and Innovation). Additionally, we have been involved in the H2020 project D4All (Digital Europe for All) and the ESA RPA project PQC Key Manager, aiming to create a pilot solution that can upgrade the



existing EGSE key management with PQC algorithms, ensuring that neither the temporary storage of keys nor the key exchange algorithms are vulnerable to quantum attack. We have also been involved in national projects CRP-MORS (Comprehensive analysis and a strategy to enhance resilience to cyber risks in the ICT and weapons systems of the Slovenian Armed Forces) and CRP NNKV (Advanced National Cyber Range). Finally, we are also involved in the Digital Europe project AKADIMOS (Governance and Operational support for the development of the European Cybersecurity Skills)

• (*) **Keywords describing the expertise requested/offered (up to 10 words)**

We have extensive experience in the following areas, relevant to the call topic:

- applied cryptography
- cybersecurity
- authentication and identity management
- machine learning for cybersecurity
- cybersecurity education and training
- privacy
- digital forensics

Our portfolio includes many European and national projects, the most relevant being:

- H2020 pilot project for establishing and managing the operation of the European network of cybersecurity competence centres, CyberSec4Europe (Cybersecurity for Europe)
- H2020 pilot project for establishing and managing the operation of the European network of cybersecurity competence centres CONCORDIA (Cyber Security Competence for Research and Innovation)
- H2020 project D4All (Digital Europe for All)
- ESA RPA project PQC Key Manager, aiming to create a pilot solution that can upgrade the existing EGSE key management with PQC algorithms
- CRP-MORS (Comprehensive analysis and a strategy to enhance resilience to cyber risks in the ICT and weapons systems of the Slovenian Armed Forces), national project
- national project CRP NNKV (Advanced National Cyber Range), national project
- Digital Europe project AKADIMOS (Governance and Operational support for the development of the European Cybersecurity Skills)



Your organisation information

(*) Organisation and country:

University of Maribor, Faculty of Electrical Engineering and Computer Science,
Koroska cesta 46, 2000 Maribor, Slovenia

(*) Type of organisation:

☐ Enterprise ☐ SME ☒ Academic ☐ Research institute ☐ Public Body ☐ Other:

Former participation in Horizon Europe projects or other Framework programme European projects?

☒ Yes ☐ No

(FP7, H2020, Horizon Europe, Digital Europe, ESA)

Web address:

<https://feri.um.si/en/>

Description of the organisation:

Name: University of Maribor, Faculty of Electrical Engineering and Computer Science

Short Name/Abbreviation: UM FERi

PIC Number: 999903646

The University of Maribor (UM), founded in 1975, is the second largest and second oldest university in Slovenia, comprising 17 Faculties, the University Library Maribor, and Student Dormitories. With 181 study programs and 13,899 students, UM is the main knowledge provider in East Slovenia's cohesion region. Its faculties cover a wide range of disciplines, and strong links with industry ensure knowledge and technology transfer, student involvement in research, and support for graduates entering the labour market.

UM leads the Digital Innovation Hub – DIH UM, uniting Slovenian and European expertise to deliver advanced digital solutions, including machine learning for cybersecurity and privacy-preserving technologies. It is active in DIH Slovenia, DIH Eastern Slovenia, DIH Smart Manufacturing, and DIH AGRIFOOD, and its activities align with "Digital Slovenia 2020" and the Slovenian Digital Coalition – digitalna.si.



As the Slovenian Entry Point for the Danube Transfer Centre, UM – particularly the Faculty of Electrical Engineering and Computer Science (UM FERI) – plays a leading role in initiatives such as EUSALP AG5 and SRIPs. UM FERI has strong expertise in applied cryptography, cybersecurity, authentication and identity management, machine learning for cybersecurity, privacy, and digital forensics, integrating these fields into research, study programmes, and industry collaborations. It also promotes cybersecurity education and training, building capacity for future experts to address emerging threats. UM FERI hosts the Centre for Artificial Intelligence, developing AI algorithms for high-performance computing, remote sensing, communication networks, agrifood, and advanced cybersecurity solutions.

(*) Contact details

Contact person name	Marko Hölbl, assoc. prof., Vice-dean for research
Telephone	+386 2 220 7361
E-mail	marko.holbl@um.si
Country	Slovenia