EÖTVÖS LORÁND
UNIVERSITY | BUDAPEST

Introducing
the DigitalTech EDIH Hungary

European Digital Innovation Hubs (EDIHs) are one-stop shops supporting companies to respond to digital challenges and become more competitive. By providing access to technical expertise and testing, as well as the possibility to 'test before invest', EDIHs support companies to **improve business/production processes, products, or services using digital technologies.** They also provide innovation services, such as financing advice, training, and skills development that are central to successful digital transformation. The initiative is part of the Digital Europe programme of the European Union.

DigitalTech EDIH Hungary services cover the following areas

1. Skills and training
2. Test before invest
3. Innovation ecosystem and networking
4. Support to find investments
5. Other business development services and technology-related advisory

ELTE Faculty of Informatics plays a leading role in research and education of computer science in Hungary. Our study programmes focus on Software Technology, Information Systems, Data Science, Artificial Intelligence, Cyber Security, Autonomous Systems, Mathematical Modelling, and Fintech. Major domains of basic and applied research are software technology for reliable systems, static source code analysis and transformation, geometric computer vision, software defined networks, large scale data analysis, data science applications in agroinformatics, hyper-parameter tuning, several areas and applications of artificial intelligence, machine learning and human-machine interactions, software technology for quantum computing, quantum resistant cryptography, I4.0, mathematical modelling for image and signal processing, secret sharing schemes, cryptographically secure protocols, blockchain technology. On the basis of these topics the Faculty has developed in the past two decades a complex innovation ecosystem with multistakeholder partnerships from all over the world.

ELTE | FACULTY OF INFORMATICS

Co-funded by the European Union

Budapest, October 2022

SCAN ME

Project starting date: 01/10/2022
Duration: 36 months

Total project budget:	**€5,399,998.96**
EU contribution:	€2,699,994.48
National co-financing:	€2,699,994.48

Project partners

- EIT Digital Hungary Nonprofit Ltd. (coordinator)
- Eötvös Loránd University Faculty of Informatics
- Blockchain Hungary Association
- Budapest University of Technology and Economics
- Central Transdanubian Regional Innovation Agency
- Digital Government Development and Project Management Company
- Infoter Hungary Nonprofit Ltd.
- IVSZ – IT Association of Hungary
- Primom Foundation for Enterprise Promotion of Szabolcs-Szatmar-Bereg County
- University of Debrecen

Innochange / EIT Digital

InnoChange: Driving Change, Capacity Building Towards Innovative, Entrepreneurial Universities: an EIT - HEI Initiative - Innovation Capacity Building for Higher Education project to improve the entrepreneurial and innovation capacity of HEIs, strengthen and better integrate into, and engage with, innovation ecosystems in Central and Eastern Europe. ELTE is the consortium leader, partners come from EE, RO, SK and UK.

https://innochangeproject.eu/

HumanE AI Network / H2020

HumanAI Vision of European Artificial Intelligence project aims to strengthen the European AI community through the AI4EU platform and a Virtual Laboratory, develop a series of summer schools, tutorials and MOOCs to spread the knowledge, develop a dedicated innovation ecosystem for transforming research and innovation into an economic impact and value for society, establish an industrial Ph.D. programme and involve key industrial players from sectors crucial to the Europe.

https://www.humane-ai.eu/

IFRoS / Erasmus Mundus Joint Master

The Intelligent Field Robotic Systems (IFRoS) is a 2-year joint master degree with 120 ECTS. IFRoS is aimed at a new generation of engineers who will develop new applications and tools to expand the capabilities of field robots in the near future. The technology behind these systems comes from different research areas such as artificial intelligence, computer vision, control, sensorisation, machine learning, manipulation, all of them under fast-paced evolution in the current digital revolution. IFRoS addresses the lack of master programmes dedicated to intelligent robots and, more specifically, to field robotic systems.

https://ifrosmaster.org/

QCI Hungary / Digital Europe

The QCIHungary project aims to lay down the foundations of a national quantum communication infrastructure in Hungary, with the eventual goal to participate in the creation of a larger pan-European quantum network. We plan to connect the capital, Budapest, with three cities in three different directions (Győr, Nagykanizsa, Szeged) with the future possibility of cross-border connections with Austria, Slovakia, Slovenia, Croatia, and Romania. Within Budapest a metropolitan network is envisioned to be employed for various purposes. The project will complement its deployment efforts by developing a software stack including a universal encryptor including authentication and encryption of the sent data using classical cryptographic methods and interface to the deployed advanced QKD systems.

DESIRE6G / Horizon Europe

Over the past decades the mobile communications has evolved over the different generations to the current 5G, and transformed into a fundamental infrastructure that supports digital demands from all industry sectors. The Deep Programmability and Secure Distributed Intelligence for Real-Time End-to-End 6G Networks (DESIRE6G) project will design and develop novel zero-touch control, management, and orchestration platform, with native integration of AI, to support eXtreme URLLC application requirements.

FoodMAPP / Horizon Europe MSCA Staff Exchange

The objective of FoodMAPP is to lead the transformation of food supply by enabling and promoting transparent local provision from local producers, including small scale family farmers, and processors direct to consumers. FoodMAPP will, for the first time, gather extensive market intelligence from all stakeholders including producers, processors, consumers to understand market demand and preferences towards localised food supply transparency.

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Selection from our ongoing EU projects