



Dennis Gabor Memorial Year

Erasmus+

FIFI2026

THE FUTURE OF INTELLIGENCE
THE FUTURE OF IMPLEMENTATIONS

ABSTRACT VOLUME



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09:15-10:00 REGISTRATION

10:00-10:05 RECTOR'S WELCOME ADDRESS (DR. KRISZTINA ZIMÁNYI, PLENARY HALL)

10:05-12:15 PLENARY LECTURES (PLENARY HALL / GÁBOR DÉNES LECTURE HALL)

- Dr. Viktor Dörfler, Professor of AI Strategy, University of Strathclyde
- Prof. Dr. Petra Aczél, Head of the AI and Future Strategies Center, Széchenyi István University
- Péter Hidvégi, Managing Director, SAP Hungary
- Gergely Kovács, Head, XR Coalition

12:15-13:00 LUNCH BREAK (1ST FLOOR)

13:00-13:15 PRESS CONFERENCE (PLENARY HALL / GÁBOR DÉNES LECTURE HALL)

13:15-16:20 SECTION PRESENTATIONS & ROUNDTABLE DISCUSSIONS

(COFFEE BREAK: 14:35-14:50)

1. DEEP TECH & FINTECH (SECTION ROOM 1 / GÁBOR DÉNES LECTURE HALL)

- Zsombor Nagy, Head of AI Center, OTP Bank Plc., AI Center Director
- Rezka Norhafizah, Junior Researcher, Indonesian Kalimantan Islamic University (online)
- Dr. Viktor Vajda, Secretary General, AI Council
- Bálint Rákosi, CEO, R-Szoft Ltd.
- Antal Kuthy, Managing Director, E-Group ICT Software Plc.

Roundtable Discussion

Fintech Trends with a Focus on Agentic AI – Dr. Viktor Urbán

2. KNOWLEDGE, RESEARCH, TECHNOLOGY (SECTION ROOM 2 / NEMES TIHAMÉR HALL)

- Dávid Csurgó, Managing Director, GDE MIT
- Zoltán Biczó, Lecturer, Gábor Dénes University
- Dávid Jakab, Lecturer, Gábor Dénes University
- Dr. Viktor Urbán, Head of Fintech Specialization, Gábor Dénes University
- Tamás Szerémy, Chief Technology Officer, GDE MIT
- Gábor Budaházy, Head of Data and Analytics, GDE MIT

Roundtable Discussion – moderated by Zoltán Biczó

- László Gönczy, Head of Department, BME AI Department
- László Gulyás, Associate Professor, ELTE AI Department
- György Eigner, Dean, Óbuda University

**16:20-16:30 CLOSING SPEECH – DR. FERENC DIETZ,
PRESIDENT, GÁBOR DÉNES UNIVERSITY**

**PROMPT BATTLE – AWARD CEREMONY
(PLENARY HALL / GÁBOR DÉNES LECTURE HALL)**

PLENARY SESSIONS



TO AI OR NOT TO AI": FUTURE-PROOFING IN THE INTERSECTION OF HUMAN AND ARTIFICIAL SKILLS

Prof. Dr. Petra Aczél

Professor, Széchenyi University

Abstract: AI as is not an option anymore - it has come to be the core topic of actually all discourses of the future, as well as the tool to boost academic thinking and organizational capabilities. So the Hamletian question in the title of this talk sounds already answered. However, there is still a space reserved „outside” of AI that is why we think and talk about it with genuine human intellectual inputs, just like the present conference.

Just as the astonishingly unique lobster has become the mascot animal and label of AI operations lately have we seemingly started to dig deeper into the key literacies that should/can support human autonomy and leadership in the age of AI rewirings of organizations. The talk sets off to investigate the realms in which these skills should be identified and plans to provide their functions and compatibility with organizational needs and practices. Being eager to offer a conceptual frame the presentation wishes to tackle both challenges and existing methods to encourage policy planning and implementation.

FROM DATA TO DECISIONS: THE ROLE OF ARTIFICIAL INTELLIGENCE IN PUBLIC FINANCE MANAGEMENT

Dorota Czajkowska

Academic teacher, Uczelnia Techniczno-Handlowa Warsaw

Abstract: Artificial intelligence is increasingly entering public administration, including areas related to data analysis, service delivery and decision support. However, the key challenge is no longer only technological readiness, but the ability of public institutions to integrate AI into real decision-making processes in a responsible, transparent and measurable way.

This presentation focuses on the potential role of AI in public finance management, with particular emphasis on local government finance. It discusses how AI tools may support revenue forecasting, financial risk analysis, debt management, creditworthiness assessment and scenario-based planning. These areas are becoming increasingly important in an economic environment marked by geopolitical uncertainty, inflationary pressures, energy shocks and changing financial conditions.

The presentation also addresses the limitations and risks of AI implementation in the public sector. These include data quality, lack of transparency, accountability, ethical concerns, AI-washing and the need for proper governance. The main argument is that AI should not replace public decision-makers, but should strengthen their ability to understand complexity, assess risks and make better-informed decisions.

The presentation draws on practical experience in local government finance and refers to current discussions on AI implementation in public administration. It argues that the future value of AI in public finance will depend not only on technology, but also on strategy, governance, institutional readiness and the exchange of good practices between public administrations.

AI AGENTS ARE TRANSFORMING ENTERPRISE OPERATIONS - AN SAP INSIGHT

Peter Hidvégi

Managing Director of SAP Hungary

Abstract: Are analysts right to question the future of enterprise software companies and the SaaS model at the very dawn of the AI revolution? How does one of the world's leading software companies see the AI trends that will fundamentally reshape how businesses operate? What challenges are small and midsize enterprises facing today, and what steps can set them on a successful path toward digitalization and AI adoption?

Through compelling real-world examples, the presentation demonstrates why business context, trusted data, and deep industry expertise will be decisive in the AI-driven era. Participants will gain insight into how automation and AI agents are transforming enterprise operations—and which capabilities will truly matter over the next decade.

TEACHING THE FUTURE: AI VIBECODING, IMMERSIVE REALITIES, AND THE NEW CREATIVE POWER OF EDUCATORS

Gergely Kovács
President, XR Coalition

Abstract: We stand on the precipice of a pedagogical revolution where artificial intelligence is fundamentally transforming the role of educators—shifting them from traditional knowledge facilitators into visionary digital creators. For decades, the barrier to entry for developing bespoke, highly engaging educational technology has been nearly insurmountable for most teachers, strictly constrained by a lack of computer science expertise, restrictive school budgets, and limited time. Today, those barriers have been completely obliterated.

Enter the era of "vibecoding"—a paradigm-shifting workflow where digital applications, software, and interactive environments are forged entirely through natural language prompts rather than traditional, syntax-heavy programming. By simply communicating their pedagogical vision to advanced AI models, teachers can now rapidly conceptualize, generate, and iterate on dynamic learning materials.

As the leader of the XR Coalition, I am particularly thrilled by how this technological convergence intersects with Extended Reality. Through AI vibecoding, educators can now effortlessly conjure interactive 3D simulations, spatial computing environments, and fully immersive VR educational games. A history teacher can now verbally "code" an immersive walkthrough of ancient Rome, or a biology teacher can generate a playable VR journey inside a human cell—all without writing a single line of traditional code.

This presentation will delve deeply into the emerging role of AI as an indispensable creative partner in the modern classroom. Through concrete examples and live demonstrations, we will explore how academic content creation is becoming exponentially faster, infinitely more accessible, and radically more innovative than ever before. Attendees will leave with a clear understanding of how vibecoding is democratizing digital creation, ultimately empowering every teacher to become a master architect of the future of learning.

RENEWING HUNGARY'S ARTIFICIAL INTELLIGENCE STRATEGY: SOVEREIGNTY, COMPETITIVENESS AND IMPLEMENTATION

Prof. Dr. László Palkovics

University Professor, Dennis Gabor University- University of Debrecen

Abstract: The lecture presents the intellectual foundations, strategic objectives and implementation experience of Hungary's renewed Artificial Intelligence Strategy. The revision of the strategy was based on the recognition that artificial intelligence is not merely a field of information technology, but a key infrastructure of twenty-first-century economic competitiveness, scientific excellence and state capacity. Accordingly, Hungary's objective is not only to adopt artificial intelligence, but to become an active shaper of the AI era, while preserving its digital self-determination, cultural identity and technological room for manoeuvre.

The presentation reviews how, between April 2025 and April 2026, the Office of the Government Commissioner for Artificial Intelligence supported the implementation of the strategy through targeted policy, institutional and financial instruments. Particular attention is devoted to the achievements made in AI awareness-raising and education, the integration of AI into vocational and higher education, university-research-business cooperation, business support schemes, public-administration AI solutions, and the development of national computing capacities and data-centre infrastructure. The lecture also addresses progress in humanoid robotics, autonomous mobility, healthcare, agriculture, energy systems and high-level international technology partnerships. Based on these developments, Hungary's AI Strategy can be understood not as a static planning document, but as an adaptive,

AI + WORK IN LEARNING ORGANIZATIONS OF TOMORROW

Dr. Viktor Dörfler

Professor of AI Strategy, University of Strathclyde

Abstract: In order to understand how our work is transformed, at least in part, as a result of using AI, we need to understand human beings, organisations, and AI itself. This is a tricky combination, which may be the reason why many companies never moved beyond a pilot project, even if it was successful. AI scales well - using AI does not always scale well. This talk therefore begins with a comparison of what AI is good at in contrast to what humans excel at. This will be done along 5 dimensions: sensing, knowing, learning, creating, and doubting. Building on this foundation, work will then be examined in the context of learning organizations, with particular attention to three distinct sources of impact: AI itself, our relationship with AI, and the mental models we hold about AI. Bringing these analytical strands together, it is argued that the successful learning organization of the future will be one that achieves a meaningful balance between leveraging AI, cultivating grandmaster-apprentice relationships, and supporting vibrant communities of practice.

SESSION PRESENTATIONS



ARTIFICIAL INTELLIGENCE IN CONTACT CENTERS (USE CASES)

Gábor Budaházy

¹Head of Data and Analytics, GDE-MIT, budahazy.gabor@gde.hu

Abstract: Customer service departments operate in nearly every at least medium-sized organization — primarily, but not exclusively, in B2C-oriented ones — and in some industries they are even mandatory. Practices developed over decades are being significantly transformed by technology, digitalization, and artificial intelligence. In this presentation, after a brief summary of the typical challenges faced by customer service operations, we demonstrate — through four specific use cases — possible solutions offered by artificial intelligence and advanced analytics to address these challenges. The focus is mainly on phone-based interactions, thus the emphasis is on speech and audio analysis from a technical perspective.

The use cases are the following:

- **Call bots** - replacing (or complementing) traditional static call automation systems by handling customer interactions below a certain level of complexity, typically at the initial stage of conversations. Goal: pre-filter higher-potential conversations, forward them to human agents, and reduce the workload of staff.
- **Internal knowledge base** - a chatbot system that provides employees (especially newcomers) with immediate information about products/services during customer interactions.
- **Quality assurance** - analyzing ongoing or completed customer conversations to comprehensively collect various external and internal KPIs and other metrics, or to promote best practices.
- **Training** - training the constantly incoming new employees requires significant time and effort. This work can be at least partially taken over by various AI-based tools, typically through the simulation of different communication scenarios, question types, and challenging situations, thereby preparing future customer service agents for the demands of their work.

Keywords: artificial intelligence, advanced analytics, customer relations, contact center, call center, CRM

GÁBOR DÉNES UNIVERSITY AI KNOWLEDGE CENTER - PROJECTS AND RESEARCH OVERVIEW

Dávid Csurgó

**CEO, Gábor Dénes University Artificial Intelligence Knowledge Center,
csurgo.david@gde.hu**

Abstract: The presentation outlines the results and activities of the Gábor Dénes Egyetem Artificial Intelligence Knowledge Center. The Knowledge Center operates as a professional and methodological hub that integrates research and development, innovation, and knowledge-sharing activities to support the adoption and application of artificial intelligence in Hungary. It plays a strategic role in the national AI ecosystem by actively contributing to the implementation of the national AI strategy, supporting governmental decision-making, and participating in policy development processes.

The presentation introduces the Center's research and development activities, which focus on the practical application, methodological foundation, and scalable implementation of generative artificial intelligence technologies. As a result of these efforts, structured, well-documented, and reusable solutions have been developed, supporting technological innovation, knowledge dissemination, and the establishment of practical applications.

The presentation also briefly highlights the Knowledge Center's scientific publication activities, including research on the applications of artificial intelligence in auditing and control, and addresses its dissemination related outcomes.

Finally, the presentation outlines the Center's future directions, including the promotion of responsible, widespread, and sustainable AI adoption, as well as strengthening the necessary knowledge and competencies. In the future, it will continue to play a role in supporting cross-sector collaboration, promoting knowledge sharing, and strengthening the societal and economic adoption of AI technologies. In addition, the Center aims to adapt to the rapidly evolving technological environment and to develop flexible, future-proof solutions that contribute to digital advancement.

Keywords: chatbot, digital transformation, educational content development, knowledge sharing

AI TOOLS AND RESOURCES FOR LEARNING

Bálint Pápai

Prompt Specialist, GDE-MIT, papai.balint@gde.hu

Abstract: This presentation reviews the educational potential of generative artificial intelligence, spanning from technological foundations to practical implementation. The introductory section clarifies core concepts such as AI, LLMs, and chatbots, and illustrates the operating principles behind Large Language Models. The core of the presentation focuses on effective AI utilization through prompt engineering, as well as the evolving roles of students and educators and the new landscape of learning tools. Alongside a market overview, specific multimodal tools will be introduced that support teaching and individual student development by automating visualization, source research, and content creation. The concluding section emphasizes the vital importance of technological awareness.

Keywords: generative AI, LLM, prompt engineering, educational technology, chatbots, multimodal tools, digital reform.

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AGENTIC AI IN PROCESS TESTING

Bálint Rákosi

CEO, R-Szoft Ltd., office@r-szoft.hu

Abstract: AI agent-based systems have become one of the most dynamically evolving areas of business process automation. The aim of this presentation is to demonstrate how a real-world, productiongrade AI agent system is built and operated, based on the hands-on development experience of RSzoft Kft. The presentation first clarifies the fundamental distinction between an AI agent and an AI assistant: while an assistant reacts to direct instructions, an agent receives goals, independently plans its execution, and adapts to changing circumstances. We then introduce the six key components of a modern agentic system - perception, planning, memory, tool use, action, and orchestration.

We address the design principles of multi-agent architectures, where specialised agents collaborate to solve complex tasks [4], as well as tool integrations based on the Model Context Protocol (MCP) standard. Through concrete case studies, we illustrate how complex enterprise workflows can be automated - from SMEs to large corporations - delivering real, measurable business value.

Keywords: AI agent, agentic systems, multi-agent architecture, ReAct, process automation, generative AI, GDPR, enterprise integration

WINNING USE CASES FROM THE 2026 GDE-MIT MINDS & MACHINES HACKATHON: AI SOLUTIONS FOR HEALTHCARE AND EDUCATION

Tamás Szeremy

CTO, GDE-MIT, szeremy.tamas@gde.hu

Abstract: This presentation showcases the winning use cases from the 2026 GDE-MIT Minds & Machines Hackathon, a 30-hour innovation sprint held at Gábor Dénes University in Budapest on February 27-28, 2026. Over 300 participants submitted 42 projects across two challenge categories: Healthcare and Education. The hackathon, organized by the GDE Artificial Intelligence Knowledge Center with Microsoft Azure as technology partner, awarded EUR 13,000 in prizes. The presentation focuses on the six winning projects and the cross-cutting patterns that emerged across them. The Grand Prize winner, Kintsugi, built an AI-powered voice agent for automated post-discharge patient follow-up in the Healthcare track. All six winning teams started from quantifiable real-world problems, employed AI as a supportive tool rather than a replacement for human expertise ("Human-in-the-Loop"), and delivered deployable prototypes within 18-30 hours. The presentation concludes that the most impactful AI applications emerge when teams think in terms of domain problems rather than technological features [1][2][3].

Keywords: hackathon, artificial intelligence, healthcare AI, education technology, human-in-the-loop, rapid prototyping, innovation sprint, domain-driven design

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DENNIS GABOR UNIVERSITY'S INNOVATIVE FINTECH SPECIALIZATION

Viktor Urban

Head of Fintech Specialisation, GDE

Abstract: In the 2025/26 academic year, Gábor Dénes University (GDE) launched a fintech specialization within its Business Informatics bachelor's program (BSc) that is unique among Hungarian universities. The specialization places an unprecedented emphasis on practical experience: the curriculum was designed by entrepreneurs and experts developing state-of-the-art financial solutions. GDE's fintech specialization is a milestone in domestic higher education, as it prepares a new generation for the challenges of the digital economy by merging technological and financial expertise.

The fintech sector has entered a new phase worldwide. The focus of digital financial services is shifting from a simple online presence toward AI-supported, automated, and personalized solutions. Fintech is no longer a separate segment but an integral part of the financial ecosystem, continuously supporting the operations of the financial sector with innovative solutions. However, this requires not only a technological background but also highly skilled professionals who receive their training with an advanced, customer-centric, and digitalized mindset.

The Business Informatics bachelor's program began in September 2025, and second-year GDE students could apply for its two-semester fintech specialization. The curriculum, consisting of six subjects and a project implementation workshop, covers all essential areas of the fintech world, from developing startup ideas to the most modern marketing tools. It also touches upon current and defining topics such as sustainability, ethical services, the digital transformation of financial services, and open banking—all interpreted by professionals from the business sector. Students can acquire in-depth knowledge of fintech management, financial service processes, and fundamental development characteristics. It is particularly noteworthy that—uniquely in Hungarian higher education—the program covers NFTs and tokenization, the financial applications of blockchain, and fintech design as independent subjects.

Keywords: fintech, e-learning, blockchain, NFT, design thinking, open banking

TRANSPARENCY EFFORTS IN THE IMPLEMENTATION OF THE EU AI ACT

dr. Viktor Vajda

Secretary General · AI Advisory Board

Abstract: The presentation will examine how transparency is becoming a central principle of artificial intelligence governance in the European Union and in Hungary. It will focus on the practical implications of the EU AI Act, especially the rules on identifying AI-generated and AI-manipulated content, deepfakes and user-facing transparency obligations. The presentation will also place these developments in a broader international context, emphasizing the need for education, human rights protection, accessibility and cooperation in the responsible use of AI.

The presentation will then discuss how Hungary is responding to these regulatory challenges through its national AI law, the Hungarian Artificial Intelligence Council and the development of ethical and social guidance for AI use. It will show that legal compliance alone will not be sufficient: organizations, public institutions and society will also need clear, practical standards that build trust, support innovation and make AI understandable and accountable. The central message of the presentation will be that responsible AI governance can turn technological risks into opportunities for competitiveness, public value and social acceptance.

Keywords: AI Act, transparency, AI Advisory Board

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