ANNUAL

NEWSLETTER 2024

CYPRUS INTERACTION LAB



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WE DESIGN WITH PEOPLE AND THE COMMUNITY IN MIND, AIMING TO PRODUCE RESEARCH WITH REAL-WORLD IMPACT.

WELCOME NOTE





The Cyprus Interaction Lab (CIL) of the Department of Multimedia and Graphic Arts at the Cyprus University of Technology (CUT) is an interdisciplinary research lab specialising in Educational Technology and Human-Computer Interaction. Co-founded in 2011 by Panayiotis Zaphiris and Andri Ioannou, it is the first lab of its kind in Cyprus, distinguished by its high-quality research output and state-of-the-art facilities. At CIL, we place people and communities at the heart of our design philosophy, striving to generate research that delivers tangible real-world impact.

Our mission is to explore the pivotal role of technology in promoting learning, communication, collaboration, social change, and inclusion across diverse contexts and environments. CIL is officially merged with the EdMedia Research Group, and maintains a strong partnership with the HCI Research Group of the CYENS Centre of Excellence. These collaborations have enabled us to drive impactful research and innovation.

RESEARCH AT CYPRUS INTERACTION LAB





Research at CIL is driven by two foundational pillars:

PILLAR I

Technology Enhanced Learning & Skills Development

This pillar focuses on how technologically-mediated activity can enrich the learning experience and support the development of knowledge and skills. Our approach is grounded in the understanding that learning occurs as we play, engage, and interact with both physical and digital environments. By tapping into this dynamic process, we aim to create innovative educational interventions and tools that foster active, experiential, and embodied learning experiences.

PILLAR II

UX, LX Design & Social Innovation

This pillar focuses on the design of user experiences (UX), learning experiences (LX), and socially innovative solutions. Our research investigates human-centered design approaches that enhance usability, accessibility, and engagement in various interactive systems. This work supports the creation of environments and tools that drive social change and inclusivity, ensuring equitable access to opportunities for all community members.

Through these two core pillars, the CIL remains at the forefront of research and development in Educational Technology, Human-Computer Interaction, and social innovation. Our efforts continue to shape the future of learning, communication, and interaction, reinforcing our commitment to meaningful societal impact.

MANAGEMENT



Senior Researcher and Assistant Professor

Research Interests

Social/situated Learning, Technology Enhanced Learning, Communities of Practice, Human-Computer Interaction, User Experience, Learning Experience Research & Design.



Professor

Research Interests

Learning Design, Learning Technology, Educational Technology, CSCL Technology Enhanced Learning



Senior Researcher and Special Teaching Staff

Research Interests

Computer-assisted language learning, language learning and technology, digital humanities, Human-Computer Interaction, inclusive design with an emphasis on digital media for marginalized groups



Professor and Rector at the CUT

Research Interests

Human-Computer Interaction, Social Computing and Inclusive Design with an emphasis on the design of interactive systems for people with disabilities.

PHD STUDENTS



PhD candidate

Research Interests Educational Makerspaces, 21stcentury skills development.



PhD candidate

Research Interests Academic Makerspaces, design, and evaluation of computer science curriculum, 21st-century skills development



PhD candidate

Research Interests Environmental sustainability in entrepreneurship education for engineers, eco-preneurial skills and intentions development

PHD GRADUATES



Dr. Stella Timotheou graduated in 2024 from the Cyprus University of Technology (CUT), where she conducted her research at the Cyprus Interaction Lab. Her thesis, titled "STEAM Learning Design in the Era of Maker Education," examined how integrating a STEAM-through-Making approach can enhance content knowledge, foster positive attitudes, and develop essential skills in learning environments. Through four design-based research (DBR) cycles of design and implementation, Dr. Timotheou developed a set of learning design principles that contribute to both research and practice. Her work offers valuable insights into applying STEAM-through-Making methodologies in authentic classroom settings, advancing the field of learning design in education.

STAFF RESEARCHERS



























NEW RESEARCH PROJECTS

INTERNALLY FUNDED PROJECTS

Making Democracy: Collaborative Design and Development of an Interactive Toolkit for Human Rights Education (2024-2025)

Making Democracy is a project co-funded by CYENS (EdMedia research group, extension of the Cyprus Interaction Lab), the Cyprus University of Technology (Serious Products Lab), and Lemesos 2030: European Capital of Culture Candidate City. This is a research-driven design project focused on the design and making of an interactive toolkit for human rights education. It is an interdisciplinary endeavor building on expertise from the fields of design, human rights education, and making, to design the toolkit, whilst it explores the co-design process as it evolves through interactive workshops. This project represents a space where 'making' meets design thinking and human rights education, underscoring the value of interdisciplinary collaboration. The toolkit, as one of the main outcomes of this project, will present physical products with interactive elements and guides in the form of game rules to support young adults and their educators in facilitating learning and discussions about human rights. The toolkit will be designed to contribute to the development of democratic competences, such as empathy, respect for diversity, and active participation.



NEW RESEARCH PROJECTS

INTERNALLY FUNDED PROJECTS

Upskilling Creatives: Meeting the New Challenges of Bringing AI to Non-IT sectors (2024-2025)

The Upskilling Creatives project is co-funded by the Cyprus University of Technology (Internal Interdisciplinary Research Programme) and CYENS (EdMedia research group, extension of the Cyprus Interaction Lab). It brings together multidisciplinary expertise from the fields of Generative AI, the Applied Arts, and Instructional Design. The project is targeting students and recent graduates in the areas of Design and Applied Arts who wish to incorporate aspects of Generative AI in their practice. We aim to generate knowledge on upskilling and meeting the new challenges of bringing Generative AI to non-IT sectors. The project revolves around key concerns, which require a multi-disciplinary approach by nature: What are the needs of learners coming from Creative backgrounds in terms of gaining knowledge and competencies related to the ever-evolving field of Generative AI? What is the most suitable pedagogical model and tools for successfully achieving this goal? Workshops on Generative AI will be offered in March and April 2025, covering the following topics: Diffusion-Based Models; The Legal & Critical Perspective; AI-Powered Design & Workflow; Prompt Writing.



RESEARCH PROJECTS

EXTERNALLY FUNDED PROJECTS

Applying modern metaverse enabled pedagogical techniques for civic learning and supporting K-12 teachers and students [MetaCivicEdu 2024-2026, KA220-SCH-DA0A14F7]

Funded to the University of Piraeus Research Center - UPRC (A. Ioannou as local coordinator via CYENS). This 400K EUR cooperation partnership in school education addresses the weaknesses in the provision of civic education in primary schools. The aim of this project is to improve teachers' skills and competencies in using metaverse technologies XR (Extended Reality) to support civic learning and to better prepare them to use advanced modern technologies to help young students develop and practise the knowledge, beliefs and behaviours they need to participate in civic life and make an impact on their community. https://metacivicedu.prima.academy/



Children as Creators of Augmented Reality Stories [CARS 2024-2026, Grant No: 63F0F8B9]

Funded to the University of Malta (A. Ioannou as local coordinator via CYENS). This 250K EUR cooperation partnership in school education, aims to promote Augmented Reality (AR) as medium children can use to create and share their own stories as part of their language learning experience. The project studies the use of AR in schools and develops technical and pedagogical training for teachers. This will enable teachers to integrate the use of AR in language learning classes. The results emerging from the testing and evaluation will gauge the project's impact and disseminate findings to contribute to this research field. https://www.carsproject.eu/home



NEW RESEARCH PROJECTS

EXTERNALLY FUNDED PROJECTS

Fulbright Grant Scholarship Award | STEAM/STEM+ Maker Education

The EdMedia team (merged with CIL team) celebrates the success of its team leader Dr Andri Ioannou who has completed a research project at the Massachusetts Institute of Technology (CSAIL laboratory, HCI Engineering group), having received a Fulbright Grant Scholarship Award (fall 2024). Her research project focused on learning through Making and learning through Constructing, whilst embracing emerging technologies such as AI and AR/VR.

It builds on the idea that Maker Education has the potential to empower and inspire the people, both on the level of cultivating practical skills but also by making space for progressive pedagogies and localized solutions. In the proposed project, STEAM/STEM+ Maker Education is seen as a progressive movement, empowering educators to integrate project-based, hands-on learning within existing school structures. Rather than establishing fixed maker hubs, the project focuses on embracing a maker education mindset to bring creativity, resilience, and community relevance into the classroom, driving social innovation and inclusion. The project aims to incorporate local culture into maker projects and organize student-centered innovation challenges to address real-world issues.



For a complete list of current and previous projects click here.

NEWS & EVENTS

CARS project kick-off | Malta, January 2024

The kick-off meeting for the Erasmus+ project CARS was held in Malta in January 2024. The meeting was well attended by members of the six organisations (two members representing CYENS) that constitute the CARS partnership. This meeting served as an opportunity for project partners to meet face-to-face, discuss work packages, activities, and establish important deadlines. Hosted by the University of Malta, the meeting also provided a chance for partners to get to know each other. We are thrilled to embark on this journey, shaping the use of AR as a medium for children to create and share their own stories as part of their language learning experience.





CARS project: Face to Face teacher's training in Burgos | Burgos, October 2024

The face-to-face teacher's training of the CARS project took place in Burgos over three days, October 7th-9th. The participants engaged in both theoretical and hands-on sessions, exploring the use of augmented reality as a medium children can use to create and share their own stories as part of their language learning experience. A visit was also conducted at the Colegio Aurelio Gomez, where students were actively engaged in creating their Augmented Reality (AR) stories using the Zapworks platform.





NEWS & EVENTS

Lionfish Erasmus+ project: Multiplier event | Online, June 2024

The LIONFISH E+ Multiplier Event took place online, on the 27th of June. Its aim was to disseminate the results and outcomes of the project to primary and secondary education teachers in Cyprus. The project was dedicated to helping children aged 12-16 understand the impact of climate change on Mediterranean marine ecosystems and the correlation with the spread of the invasive Lionfish species. This was done via the design of a rich learning experience building on the use of a 360VR film and STEAM activities. The event was attended by 57 unique participants via ZOOM and received very positive feedback while promoting engaging discussions for future implementations of the experience. The attendees received access to both the Teaching & Learning Manual and the 360VR film which were presented at the event. Additionally, we shared insights from our pilot studies with 83 students, highlighting the effectiveness of the overall learning experience.





End of the Lionfish Erasmus+ project - Presentation at AECT2024 | USA, October 2024

For the closing of the E+ project, LIONFISH, we presented our findings at the AECT 2024 International Convention taking place in Kansas City, Missouri, USA.









NEWS & EVENTS

MetaCivicEdu E+ project kick-off | Athens, January 2024

The kick-off meeting of the MetaCivicEdu Erasmus+ project was hosted by the University of Piraeus Research Centre in Greece. The meeting has given the opportunity for project partners to meet face-to-face, discuss work packages and establish important deadlines. The meeting was well attended by members of all organisations constituting the partnership. We eagerly anticipate the pursuit of enhancing educators' expertise in leveraging metaverse technologies to foster civic learning among their young students.







MetaCivicEdu E+ project: LIS 2024 presentation | Nicosia, September 2024

A systematic literature review, entitled 'Exploring Metaverse-enhanced learning: learning design practices in K-12 education', which was an outcome of the MetaCivicEdu E+ project was presented at the Learning Innovation Summit (LIS2024) in Nicosia on the 14th of September 2024.





NEWS & EVENTS

MetaCivicEdu E+ project: Consortium meeting | Limassol, October 2024

The consortium meeting was hosted by the EdMedia research group of CYENS at the premises of the Cyprus University of Technology (Cyprus Interaction Lab) in Limassol. The project partners discussed current progress on developing metaverse-enhanced learning scenarios for civic education as well as virtual learning environments for their enactment. They also discussed next steps in the project which involve teachers training and pilot testing with students. We look forward to advancing educators' skills in using metaverse technologies to promote civic learning amongst young learners.





Social Game Design and Evaluation Workshop | Limassol, November 2024

Designed by Ål Nik (Alexandra Nikolova) during her residency with EdMedia @CYENS, the "Our Future Is Somewhere Here" social game explores how different elements influence our past and present (such as family, friends, media, culture, government, big tech and more) and gives the players the opportunity to co-create a possible future as a group. This is a collaboration game made to connect people and give them a safe space to talk about their experiences and imaginations. During her residency, Alexandra facilitated game sessions with various groups of participants (local community, researchers, other artists-in-residence, etc.) in order to test the game and gather data about gameplay perception and reach goals. The first session was hosted by EdMedia in Limassol and took place on the 1st of November 2024. The aim of the workshop was to evaluate a prototype of the game and examine how the game experience initiates healthy and exciting conversations amongst players. A user-centered design approach is followed to the design of this social game.







NEWS & EVENTS

Celebrating Creativity: CYENS Artist Residency Program Showcase | Nicosia, December 16-20, 2024

The CYENS Artist Residency Program Showcase, coordinated by the Thinker Maker Space at the CYENS Centre of Excellence in partnership with EdMedia, Museum Lab, and ITICA, celebrated its successful completion on December 13th, 2024, with a captivating opening event.

This year's program highlighted the works of six exceptional artists who collaborated closely with CYENS research groups, exploring the intersections of art, science, and technology. Among them, Ágnes Kaszás and Ål Nik (Alexandra Nikolova), supervised by EdMedia, stood out for their groundbreaking contributions, skillfully blending creative ingenuity with cuttingedge research.

The opening offered visitors an opportunity to meet the artists, delve into their creative journeys, and witness how their ideas evolved into thought-provoking artworks. Kaszás and Nikolova captivated audiences with their innovative approaches, sparking discussions on the power of interdisciplinary collaboration. The event concluded with a dynamic collective presentation, inviting attendees to experience firsthand how creativity and research converge to drive innovation and new perspectives.















NEWS & EVENTS

ARIDLL second expert workshop hosted by the Cyprus Interaction Lab | Limassol, April 2024

The second expert workshop was organized by the Cyprus Interaction Lab as part of the ARIDLL (Augmented Reality Instructional Design for Language Learning) EU-funded project. The aim of the workshop was to explore and consolidate best practices of applying Augmented Reality technology to language learning.

Partners from 6 different countries joined the workshop, among those the Norwegian University of Science and Technology (Coordinator, Norway), the Cyprus University of Technology (Cyprus), the Heilbronn University of Applied Sciences (Germany), the Augsburg Technical University of Applied Sciences (Germany) the University of Cadiz (Spain), the University of Cyprus (Cyprus), the Open University (UK) and the 15th Primary School of Evosmos (Greece).

The workshop, held from April 22nd to April 24th, 2024, provided a platform for intensive discussions, skill-building sessions, and strategic planning to enhance the effectiveness of language learning through cutting-edge AR technologies. Participants engaged in a series of focused sessions designed to address key challenges, share insights, and develop innovative solutions with the use of Augmented Reality for language learning.

Find out more about the project: https://aridll.eu/





NEWS & EVENTS

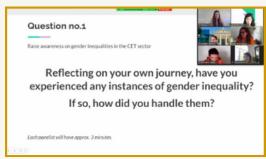
FemPower Project: Empowering Women in Clean Energy Transition | April-May 2024

The FemPower project, with Cyprus Interaction Lab as a partner, is advancing gender equality in the Clean Energy Transition (CET) sector through impactful initiatives:

- Free Online Course: Explore a MOOC featuring insights from professionals and inspiring videos for young women. Enroll at https://www.pok.polimi.it/mod/page/view.php?id=11274 to get the most out of this course. You will have access to all the contents in various formats, you will have the chance to engage in discussions with other learners in the forum and receive the Certificate of Accomplishment if you complete the MOOC.
- Limassol Event (May 2024): Cyprus Interaction Lab hosted an online event addressing gender inequalities in CET, featuring a keynote by Natasa Pilides, a roundtable with experts, and presentations on tools like the gender-inclusive STEAM toolkit and FemPower Network. Several key outputs of the FemPower project were presented and are available here.
- **Serbia Workshop (April 2024):** A three-day workshop trained staff on gender-inclusive strategies and developed a sustainability plan for FemPower.

Discover more about FemPower and its resources at: https://fempower.ee.auth.gr









NEWS & EVENTS

DRFLEMP E+ Project Completion: Language training in the health sector using Mixed Reality | Dusseldorf, February 2024

The final Transnational Meeting of the DRFLEMP project took place at the INTAMT offices in Düsseldorf, Germany on 21 February 2024, marking also the closing of the DRFLEMP project, funded by Erasmus+ which was completed on 29 February 2024. The final project meeting was followed by the conference "Modern technologies against labour shortage", which was open to the public with participants attending on-site and online. An overview of the project, the partners involved in it and the results achieved was given. The key outputs of the project include a best practice catalogue, development of mixed reality simulation scenarios, the DRFLEMP mixed reality application enhanced by artificial intelligence, two mixed reality-based learning modules and training courses in virtual and mixed reality. We invite you to watch the video presentation of the prototype developed on YouTube (https://youtu.be/lilkkEycYpE).





Sensing Nicosia Walkshop at Work in Progress (WIP) Festival 2024 | Nicosia, October 2024

The HCI team (collaborating closely with CIL team) successfully designed and led the Sensing Nicosia Walkshop at WIP Festival 2024, inviting participants to explore the city through the lens of multisensoriality. This workshop encouraged a deeper connection with Nicosia by engaging all five senses—sight, touch, smell, taste, and hearing—while challenging the dominance of visual stimuli and hyperreal simulations in urban environments. Inspired by phenomenology, the workshop emphasized perception as an active, embodied experience, highlighting how sensory engagement shapes our understanding of space. The workshop aimed to reconnect participants with the sensory richness of Nicosia, critically reflect on the role of technology in mediating sensory experiences, and empower participants to advocate for urban spaces that celebrate the full range of sensory engagement. Key activities included Collective Analog Mapping, where participants created physical maps to represent their sensory journeys, and Collective Digital Mapping, using Padlet to share their most intense sensory experiences. These exercises facilitated reflection on sensory interactions and the impact of digital mediation.





NEWS & EVENTS

Sensing Heritage Workshop at the Designing Interactive Systems (DIS) 2024 conference | Copenhagen, July 2024

The HCI team (collaborating closely with CIL team) successfully organised the "Sensing Heritage" workshop at DIS 2024, held on July 2, 2024, at the IT University of Copenhagen. This interdisciplinary event explored innovative methods for capturing, experiencing, and preserving the sensory dimensions of cultural heritage, beyond the visual, incorporating sound, smell, taste, and touch. With a keynote by Professor Luigina Ciolfi and hands-on activities such as brainstorming sessions, a sensory walk, and collaborative design exercises, the workshop fostered meaningful dialogue among researchers, designers, and community members. It contributed to developing new methodologies and technologies for multisensory heritage preservation, emphasising community engagement and interdisciplinary collaboration.



Design and Facilitation of Design Thinking Workshops at the 5th National Youth Conference 2024 [Youth Board of Cyprus]

The HCI team (collaborating closely with CIL team) successfully facilitated the design thinking workshops during the 5th National Youth Conference, organised by the Youth Board of Cyprus on November 19, 2024. This event, held at the Presidential Palace in Nicosia, stands as the largest design thinking workshop in Cyprus to date, engaging approximately 200 young participants.



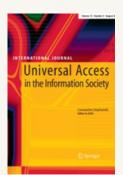


FEATURED PUBLICATIONS

Please visit the **Cyprus Interaction Lab Google Scholar profile** to view a complete list of the publications of the Cyprus Interaction Lab team. Please browse below for **indicative videos** of our work within our research themes.



Ioannou, A., Miliou, O., Adamou, M., Kitsis, A., Timotheou, S., & Mavri, A. (2024). Understanding practicing and assessment of 21st-century skills for learners in makerspaces and FabLabs. Education and Information Technologies, 1-18.



Christou, E., Parmaxi, A. & Zaphiris, P. A systematic exploration of scoping and mapping literature reviews. Univ Access Inf Soc (2024). https://doi.org/10.1007/s10209-024-01120-3



Ioannou, A., Miliou, O., Georgiou, Y. et al. Learning design for short-duration e-textile workshops: outcomes on knowledge and skills. Education Tech Research Dev (2024). https://doi.org/10.1007/s11423-024-10411-8



loannou, A., Gravel, B.E. Trends, tensions, and futures of maker education research: a 2025 vision for STEM+ disciplinary and transdisciplinary spaces for learning through making. Education Tech Research Dev 72, 1–14 (2024). https://doi.org/10.1007/s11423-023-10334-w



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