

ARGYRIS CONSTANTINIDES – CV

Email: argyris.co@gmail.com, Tel: (+357) 99870494

- Professionally experienced as a project manager, researcher, and software developer in EU research projects (Erasmus+ 2023 NARRATE, Erasmus+ 2021 CREAMS, Erasmus+ 2020 TRUSTID, H2020 SERUMS, EU-AAL MEMENTO) and National research projects (PersonaWeb, Smartag). In the past, I have worked as a software developer at Geneity Limited (Playtech), London, UK (2015-2017).
- CTO and co-founder of Cognitive UX Ltd., Leading Projects at Cognitive UX GmbH, and Special Teaching Scientist at the Department of Computer Science, University of Cyprus.
- Holder of a PhD in Computer Science from the University of Cyprus (2018-2022), an M.Sc. in Web Science and Big Data Analytics from the University College London (2014-2015), and a B.Sc. in Computer Science from the University of Cyprus (2010-2014).

WORK EXPERIENCE

Sep 2019 – Present

CTO AND CO-FOUNDER – COGNITIVE UX LTD., NICOSIA, CYPRUS & PROJECT LEADERSHIP AND MANAGEMENT – COGNITIVE UX GMBH, HEIDELBERG, GERMANY

- Make all executive decisions with regards to the technological interests of the company.
- Responsible for outlining the company's technological vision, implementing technology strategies, and ensuring that the technological resources are aligned with the company's business needs.
- Directed vendor management activities, including the evaluation, negotiation, and oversight of strategic partnerships to ensure the delivery of optimal technology solutions aligned with organizational objectives.
- Management of research projects funded by the European Union. This included leading a team of 6 software developers and preparing reports.
- Involved in the design, development, and integration of various technologies as part of the research projects.

Jan 2018 – Present

SPECIAL TEACHING SCIENTIST, UNIVERSITY OF CYPRUS, NICOSIA, CYPRUS

- Served as the primary instructor for 8 courses, teaching over 900 students.
- Indicative courses taught: Introduction to Programming, Data Structures and Algorithms, Data Manipulation, Data Visualization, Human-Computer Interaction, Computer Science and Information Systems.
- Served as teaching assistant of 3 courses, including Introduction to Programming, Computer Science and Information Systems, and Databases.

RESEARCHER, HUMAN-CENTERED COMPUTING GROUP, UNIVERSITY OF CYPRUS, NICOSIA, CYPRUS

- My research interests revolve around the area of Human-Computer Interaction, Usable Security, Artificial Intelligence, and Intelligent User Interfaces.
- Supervision of 9 undergraduate Computer Science students' dissertations.
- Participated in the 1st Cybersecurity Cyberdefense Hackathon (received the 2nd Prize).

Nov 2015 – Dec 2017

SOFTWARE DEVELOPER – SITE RELIABILITY, GENEITY LIMITED (PLAYTECH), LONDON, UK

- Involved in the development and maintenance of the common projects, including communication and service libraries, development and integration tools, and configuration and monitoring tools.
- Involved in the development and maintenance of the build/deployment/management of containerized applications as microservices and responsible for the stability of the development environments.
- Member of the Out of Hour Support Team – 1st Line Support for issues reported on production environments.

Jun 2014 – Aug 2014

RESEARCH INTERN, DMAC LAB, UNIVERSITY OF CYPRUS, NICOSIA, CYPRUS

- Highly involved in the Web development of a national-funded research programme (PersonaWeb), which is a framework for dynamic adaptation and personalization of general content eServices, based on cognitive and human factors.

Jun 2011 – Aug 2011

SUMMER STAFF, IT DEPARTMENT, KPMG, NICOSIA, CYPRUS

- Operating System installation (including imaging and remote installation).
- Software installation and configuration.
- End User Support.
- IT asset inventory.

EUROPEAN AND NATIONAL PROJECTS

COST BEING-WISE

Project Title: Action CA22104 - BEING-WISE (2023-2027) - <https://beingwise.eu/>
Funding: European Union
Description: Behavioral Next Generation in Wireless Networks for Cyber Security
Responsibilities: Participation in Working Group 4 (Human factors in wireless security). Preparation of deliverables.

ERASMUS+ 2023 NARRATE

Project Title: NARRATE (2023-2024) - <https://www.narrateproject.eu/>
Funding: European Union (250K Euro)
Description: Digital Recording and Documentation of Ecclesiastical Cultural Treasures in Monasteries and Temples
Responsibilities: Principal Investigator and Project Manager. Led all phases of project execution, including planning, team coordination, and reporting.

ERASMUS+ 2021 CREAMS

Project Title: CREAMS (2021-2024) - <https://www.creams-project.eu/>
Funding: European Union (399K Euro)
Description: Scaffolding Creativity of Arts Students: Framework, Toolchain, and Educational Material on how to Create their Own Virtual Exhibitions
Responsibilities: Project Manager and Work Package Leader. Managed the development and integration of various implemented technologies and tools (e.g., Web-based application, Virtual/Mixed/Augmented reality applications) for the creation and management of virtual exhibitions for art students. Responsible for the alignment with project objectives and stakeholder requirements, as well as the timely delivery of key milestones and preparation of deliverables.

ERASMUS+ 2020 TRUSTID

Project Title: TRUSTID (2021-2023) - <https://trustid-project.eu/>
Funding: European Union (290K Euro)
Description: Intelligent Student Identity Management for Higher Education Institutions
Responsibilities: Project Manager and Intellectual Output Leader. Managed the development of the multi-tier continuous user identification framework and the integration of machine learning for face-, voice- and interaction-based continuous user identification techniques. Responsible for the alignment with project objectives and stakeholder requirements, as well as the timely delivery of key milestones and preparation of deliverables.

H2020 SERUMS

Project Title: SERUMS (2019-2022) - <https://www.serums-h2020.org/>
Funding: European Union (4.3M Euro)
Description: Securing Medical Data in Smart Patient-Centric Healthcare Systems
Responsibilities: Responsible for the design and implementation of the User Authentication scheme. Preparation of deliverables.

AAL-MEMENTO

Project Title: MEMENTO (2017-2020) - <http://www.memento-project.eu/>
Funding: European Union (2.1M Euro)
Description: A persuasive system supporting Memory and Moments of people with Early and Middle stage of dementia.
Responsibilities: Worked on the design of the workflow and the test plan. Heavily involved in the technical verification of each component of the system. Preparation of deliverables.

RPF-PERSONAWEB (ΤΠΕ/ΠΛΗΡΟ/0311(ΒΙΕ)/10)

Project Title: Personalizing Generic Web Environments (2012-2015) - <https://personaweb.cs.ucy.ac.cy/>
Funding: Cyprus Research Promotion Foundation
Description: PersonaWeb aims to build and evaluate an adaptive interactive system for the dynamic adaptation and personalization of generic Web content based on human factors.
Responsibilities: Heavily involved in the design and development of the Content Management and the Personalization modules of the system.

EDUCATION

Jan 2018 – Apr 2022

PHD COMPUTER SCIENCE, UNIVERSITY OF CYPRUS, NICOSIA, CYPRUS

Dissertation: "Personalized Cued-recall Graphical User Authentication based on Image Content Familiarity"

My dissertation proposes a new retrospective-based and personalized image delivery approach for cued-recall Graphical User Authentication (GUA) schemes. The suggested approach is realized in a Web-based cued-recall GUA scheme, coined RetroPass, by leveraging on end-users' sociocultural experiences for the delivery of personalized images, which depict sceneries that reflect end-users' sociocultural activities, experiences and declarative memories on different levels of abstraction.

Sep 2014 – Jun 2015

MSc WEB SCIENCE AND BIG DATA ANALYTICS, UNIVERSITY COLLEGE LONDON, LONDON, UK

A specialist programme that covers fundamental aspects of Web related technologies and big data analytics, ranging from information search and retrieval, data mining and analytics, large-scale distributed and cloud computing, to E-Commerce and their business economic models, and the latest concepts of Web 2.0 and the underlying network science.

Coursework: A challenging one-year programme covering 8 taught modules, including Information Retrieval and Data Mining, Distributed Systems and Security, Multimedia Systems, Complex Networks and Web, Web Economics.

Dissertation: "Relevance, Popularity, Credibility: A Novel URL Recommender System on the Social Web"

My dissertation is part of an online social website, coined Searcular, which combines Google search with social networks aiming to provide personalized recommendations for improving user search experience by looking at like-minded people. My contribution revolves around the recommendation of relevant, popular and credible public URLs extracted from social networks.

Sep 2010 – Jun 2014

BSc COMPUTER SCIENCE, UNIVERSITY OF CYPRUS, NICOSIA, CYPRUS

Grade: 8.19/10

A combination of theoretical and practical aspects of Computer Science, examined in terms of final year written exams as well as the application of practical tools to individual and team projects.

Coursework: An intensive four-year course covering 33 taught modules, including Communications and Networks (8.5/10), Logic in Computer Science (8.0/10), Networks Information Security (8.0/10), Systems Programming (8.5/10), Advanced Networks (8.0/10), Computer Architecture (8.0/10), Mobile Computing Systems – Android Development (9.5/10).

Dissertation: "Tool for Development and Processing of General Content eServices for Personalized and Adaptive System"

My dissertation is part of a national-funded research programme, coined PersonaWeb, aiming to supply a framework for dynamic adaptation and personalization of general content eServices, based on cognitive and human factors.

Sep 2005 – Jun 2008

ST. NEOFYTOS LYCEUM, PAPHOS, CYPRUS

School-leaving certificate: 19.83/20 (Excellent)

Principal Subjects: Computer Science (20/20), Mathematics (19/20), Physics (19/20)

SELECTED PUBLICATIONS

Stamou, A., Nassis, F.C., Chrysafi, E., Sylaiou, S., Kaya, G., Sarlak, E., Ribolov, S., Karavaltchev, V., **Constantinides, A.**, Belk, M. and Stylianidis, E. (2025). Preserving Ecclesiastical Cultural Heritage of Thrace: A Needs Analysis for Digital Recording in Monasteries and Temples. *Heritage*, 8(2), p.66.

Constantinides, N., **Constantinides, A.**, Koukopoulos, D., Fidas, C. and Belk, M. (2024). CulturAI: Exploring Mixed Reality Art Exhibitions with Large Language Models for Personalized Immersive Experiences. In *Adjunct Proceedings of the 32nd ACM Conference on User Modeling, Adaptation and Personalization* (pp. 102-105).

Constantinides, A., Belk, M., Fidas, C., Beumers, R., Vidal, D., Huang, W., Bowles, J., Webber, T., Silvina, A. and Pitsillides, A. (2023). Security and Usability of a Personalized User Authentication Paradigm: Insights from a Longitudinal Study with Three Healthcare Organizations. *ACM Transactions on Computing for Healthcare*, 4(1), pp.1-40.

Fidas, C.A., Belk, M., **Constantinides, A.**, Portugal, D., Martins, P., Pietron, A.M., Pitsillides, A. and Avouris, N. (2023). Ensuring Academic Integrity and Trust in Online Learning Environments: A Longitudinal Study of an AI-centered Proctoring System in Tertiary Educational Institutions. *Education Sciences*, 13(6), p.566.

Constantinides, A., Faria, J., Sousak, T., Martins, P., Portugal, D., Belk, M., Pitsillides, A. and Fidas, C. (2023). TRUSTID: Intelligent and Continuous Online Student Identity Management in Higher Education. In Adjunct Proceedings of the 31st ACM Conference on User Modeling, Adaptation and Personalization (pp. 110-114).

Portugal, D., Faria, J.N., Belk, M., Martins, P., **Constantinides, A.**, Pietron, A., Pitsillides, A., Avouris, N. and Fidas, C.A. (2023). Continuous user identification in distance learning: a recent technology perspective. Smart Learning Environments, 10(1), p.38.

Webber, T., Kuster Filipe Bowles, J., **Constantinides, A.**, Belk, M. and Morley, E. (2022). Evaluating a smart healthcare system design through participatory approach. Advances in Informatics, Management and Technology in Healthcare.

Constantinides, A., Constantinides, C., Belk, M., Fidas, C. and Pitsillides, A. (2021). Applying Benford's Law as an Efficient and Low-cost Solution for Verifying the Authenticity of Users' Video Streams in Learning Management Systems. In IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology (pp. 563-569).

Constantinides, A., Fidas, C., Belk, M., Pietron, A.M., Han, T. and Pitsillides, A. (2021). From hot-spots towards experience-spots: Leveraging on users' sociocultural experiences to enhance security in cued-recall graphical authentication. Int. Journal of Human-Computer Studies, 149, p.102602.

Constantinides, A., Belk, M., Fidas, C. and Pitsillides, A. (2021). Understanding Insider Attacks in Personalized Picture Password Schemes. In IFIP Conference on Human-Computer Interaction (pp. 722-731).

Constantinides, A., Pietron, A.M., Belk, M., Fidas, C., Han, T. and Pitsillides, A. (2020). A Cross-cultural Perspective for Personalizing Picture Passwords. In Proceedings of the 28th ACM Conference on User Modeling, Adaptation and Personalization (pp. 43-52).

Costi, A., Belk, M., Fidas, C., **Constantinides, A.** and Pitsillides, A. (2020). CogniKit: An Extensible Tool for Human Cognitive Modeling based on Eye Gaze Analysis. In Proceedings of the 25th ACM International Conference on Intelligent User Interfaces Companion (pp. 130-131).

Constantinides, A., Belk, M., Fidas, C. and Pitsillides, A. (2020). An Eye Gaze-driven Metric for Estimating the Strength of Graphical Passwords based on Image Hotspots. In Proceedings of the 25th ACM International Conference on Intelligent User Interfaces (pp. 33-37).

Constantinides, A., Belk, M., Fidas, C. and Pitsillides, A. (2019). "I Recall this Picture": Understanding Picture Password Selections based on Users' Sociocultural Experiences. In 2019 ACM/IEEE International Conference on Web Intelligence (pp. 408-412).

Constantinides, A., Belk, M., Fidas, C. and Pitsillides, A. (2019). On the Accuracy of Eye Gaze-driven Classifiers for Predicting Image Content Familiarity in Graphical Passwords. In Proceedings of the 27th ACM Conference on User Modeling, Adaptation and Personalization (pp. 201-205).

Constantinides, A., Belk, M., Fidas, C. and Samaras, G. (2018). On Cultural-centered Graphical Passwords: Leveraging on Users' Cultural Experiences for Improving Password Memorability. In Proceedings of the 26th ACM Conference on User Modeling, Adaptation and Personalization (pp. 245-249).

OTHER

Languages

- Greek [Mother tongue], English [Fluent], Spanish [Conversational]

Technical Skills

- Programming languages: Python, Java, C/C++, C#, Bash (Unix shell)
- Web development: PHP, CSS, JavaScript (AJAX / jQuery)
- Databases: MS SQL Server, PostgreSQL, MySQL, Couchbase Server, MongoDB, Oracle
- Continuous Integration/Continuous Development tools: GitHub, GitLab, Jenkins
- Container management: Docker, Kubernetes
- Project Management Tools: Jira, Trello
- IDEs: MS Visual Studio, Eclipse, IntelliJ IDEA, PyCharm, Visual Studio Code
- Markup languages and Data Formats: HTML, XML, JSON, YAML, TOML, CSV
- Mobile development: Android OS, Flutter, React Native
- Data analysis and visualization: MS Excel, MS Power BI, Salesforce Tableau