

CURRICULUM VITAE

PROF.AS.DR MIRANDA HARIZAJ

Family name	Miranda HARIZAJ
Country of Citizenship/Residence	Albania

KEY QUALIFICATIONS

- Over 15 years of experience in the design, development, and management of ICT systems and digital transformation projects, aligning innovative technologies with organizational goals.
- Proven expertise in data integration, cybersecurity frameworks (ISO 27001), and standards like ICAO 9303, ensuring secure and efficient digital systems.
- Significant experience in leading multidisciplinary projects focused on advancing sustainable technologies, industrial process optimization, and energy efficiency.
- Skilled in digital data visualization and integration platforms that could be leveraged for augmented reality (AR) applications in forestry and environmental management.
- Strong background in research collaboration across academia and industry, contributing to cutting-edge solutions for Industry 4.0 and digital transformation initiatives.
- Effective leadership in e-governance and large-scale ICT programs, demonstrating a track record of managing complex and innovative projects.
- Commitment to fostering innovation in forestry management, utilizing advanced technologies such as AR to bridge digital data and reality for sustainable development.

Education

Institution (Date from - Date to)	Degree(s) or Diploma(s) obtained:
Faculty of Electrical Engineering, Polytechnic University of Tirana, Albania (2024)	Associate Professor
Faculty of Electrical Engineering, Polytechnic University of Tirana, Albania (2017)	PhD in Smart Systems Engineering
Faculty of Information Technology, Polytechnic University of Tirana, Albania (2008), PostGraduated Advanced Studies in Control Systems Engineering	Master in Control Systems Engineering
Faculty of Electrical Engineering, Polytechnic University of Tirana, Tirana, Albania (1999)	B.Sc. and Msc Electronic Engineer – Branch Automation
QGest Organismo di Certificazione, August 2020	Certified Auditor/Lead Auditor Information Security Management Systems UNI CEI EN ISO/IEC 27001:2017
QGest Organismo di Certificazione, August 2020	Certified Auditor/Lead Auditor Privacy Information Management System EN ISO/IEC 27701:2017

QGest Organismo di Certificazione, August 2020	Certified Audits Conduction EN ISO 19011:2018 UNI CEI EN ISO/IEC 17021-1:2015
Several Providers	Numerous Technical skills training and certificates in ICT

Professional Experience

Period	Employing organization and your title/position.	Country	Summary of activities performed relevant to the Assignment
Oct 2001- Present	<u>Associate Professor</u> Polytechnic University of Tirana, Faculties of Information Technology and Electrical Engineering	Albania	<ul style="list-style-type: none"> • Lecturer in Computer Science, IoT and Automated Industrial Systems. • Proactive researcher in Cyber security, Control Systems Engineering, Fingerprint recognition and identification techniques, Machine Learning and Smart Industry. • Proactive in European and national research and development projects and activities;
October 2020 - Present	<u>Expert</u> National Agency for Scientific Research and Innovation (NASRI) Ms. Mirela MUÇA General Director (E): mirela.muca@nasri.gov.al	Albania	<p>Assessment of the technical evaluation commissions in:</p> <ol style="list-style-type: none"> 1.National programs of Scientific Research Projects; 2.National Scientific Research Infrastructures Projects of HEI; 3.Technology and Innovation project of HEI in collaboration with business; 4.Bilateral projects
October 2019 - Present	<u>Expert</u> Ministry of Education, ASCAL	Albania	<ul style="list-style-type: none"> • Assessment of the process of accreditation of High Education Institutes (Governmental and Private) education programs in ICT field. • Preparation of External Evaluation Report for the process of accreditation of High Education Institutes (Governmental and Private) study programs in ICT field.
Oct 2023 – January 2024	<u>Senior Expert</u> OSCE Presence in Albania Ms. Juliana REXHA National Antitrafficking Officer GEEID Department (E): Juliana.Rexha@osce.org	Albania	<p>Support the drafting of the Preparatory Guide for the implementation of the National Referral Mechanism (NRM) framework, focusing on anti-trafficking institutional framework and cyber-crime under the terms and conditions hereinafter set forth.</p> <ol style="list-style-type: none"> 1. Draft a diagram of the procedures in place for the identification and report of technology facilitated human trafficking, including child sexual exploitation. 2. Participate in any events that will be organized by the OSCE Presence in

			<p>Albania in this regard and gather feedback to be reflected in the Preparatory Guide.</p> <p>3. Finalize the Preparatory Guide component on technology-facilitated human trafficking, on the basis of the format to be provided by the OSCE.</p>
November 2023	<p><u>Senior Expert</u> OSCE Presence in Albania Ms. Mira XHAMALLATI National Border Management Officer (E): mira.xhamallati@osce.org</p>	Albania	<ul style="list-style-type: none"> • Design and perform a workshop module on cybercrime and cyber security for police officers from various sectors, including border police, in the regions of Shkoder, Vlora and Korca. • Deliver training on cyber security, inform and raise awareness on the cyber-enabled threats, and their consequences in the workplace of law enforcement structures in the country. • Conduct pre- and post- evaluation of youth knowledge during the workshop; • Deliverables and performance indicators • Workshop module on cybercrime and cybersecurity delivered as per the schedule. • Preparation of Final report
October 2023	<p><u>Senior Expert</u> OSCE Presence in Albania Ms. Brunilda HALILI National Community Safety Officer (E): brunilda.halili@osce.org</p>	Albania	<ul style="list-style-type: none"> • Design and perform an interactive workshop package (training module, including methodology, topics, hand-outs, training materials; training agenda; pre- and post-training evaluation forms (online through survey monkey); • Engaging presentation/s for each topic) on cyber-enabled threats for youth. The workshop package will serve to carry out workshops with youth, with the main purpose to increase knowledge and prevent victimization from online threats among them.
October 2023	<p><u>Senior Expert</u> OSCE Presence in Albania Ms. Brunilda HALILI National Community Safety Officer (E): brunilda.halili@osce.org</p>	Albania	<ul style="list-style-type: none"> • Invitation - Speaker Youth Talk on Cyber Security. • As part of the Youth in Focus II project team which is implemented by OSCE PiA since 2021, we are currently planning one of our activities within the project – Youth Talk on Cyber Security and young people.
Oct – Nov 2023	<p><u>Senior Expert</u> DCAF- Geneva Centre for Security Sector Governance</p>	Albania	DCAF- Geneva Centre for Security Sector Governance Funded Project “Enhancing Cyber security Governance in the Western

	<p>Mrs. Franziska Klopfer Principal Programme Manager, Europe and Central Asia Division (E): F.klopfer@dcaf.ch</p>		<p>Balkans”. Consultancy services on cyber incident and crisis provisions in Albania.</p> <ul style="list-style-type: none"> • Deliverable 1 Incident Identification Framework, Response Plan and Communication Procedures – In one document • Deliverable 2 Crisis Thresholds and Procedures Flow – in one document <p>Main Beneficiary: <i>National Agency for Electronic Certification and Cyber Security (AKCESK)</i></p>
<p>Aug – Oct 2022</p>	<p>Senior Expert</p> <p>High Juridical Council</p> <p>Mr. Kelment GRECA</p> <p>Director of Courts and Standards Organization Department (E): kelment.greca@klgj.al</p>	<p>Albania</p>	<p>Technical Assistance on Preparation of Design Document and Technical Specifications and for the New Integrated Court Case Management Information System (New ICCMIS) for High Juridical Council in Albanian and English languages.</p> <p>Main Beneficiaries: <i>High Juridical Council, All Juridical Independent Authorities and Institutions in Albania, Procurement, Albanian Police, General Directorate for the Prevention of Money Laundering, etc.</i></p>
<p>Oct 2020 – May 2021</p>	<p>Senior Expert</p> <p>Institute of Digital Communications & Technologies (IDCT)</p> <p>Ms. Enkeleda Kuka</p> <p>Executive Director (E): info@i4dct.org</p> <p>Albanian State Police</p> <p>Dr.Hergis JICA Head of Cyber Unit (E): hergis.jica@asp.gov.al</p>	<p>Albania</p>	<p>IDCT Funded Project “Increasing the level of security in the cyber ecosystem”, funding from Netherlands Ministry of Foreign Affairs.</p> <ul style="list-style-type: none"> ▪ Preparation of technical manual and training of law enforcement officers on Technical and socio-technical training program for police officers and social service providers in crime prevention and cyber threats as well as investigation and treatment of cybercrime victims. ▪ Develop and perform the training module on procedures that will address cyber security issues; ▪ Capacity building: train relevant authorities on tools and techniques to assist in the analysis and detection of cyber incident cases. <p>Main Beneficiaries: <i>AKCESK and Albanian State Police (Cybercrime sector)</i></p>
<p>Nov 2020 – Feb 2021</p>	<p>Senior Expert</p>	<p>Albania</p>	<p>DCAF- Geneva Centre for Security Sector Governance Funded Project “Enhancing Cyber security Governance in the Western Balkans” by the United Kingdom’s</p>

	<p>DCAF- Geneva Centre for Security Sector Governance</p> <p>Mr. Lazar LUNIC</p> <p>Project Officer, Europe and Central Asia Division</p> <p>(E): l.lunic@dcaf.ch</p>		<p>Foreign, Commonwealth & Development Office.</p> <p>Provide expert assistance to AKCESK for increasing the level of security in critical networks and information systems in the Republic of Albania's selected local governments and testing the national "Methodology for identification and classification of critical infrastructures and important information infrastructures":</p> <ul style="list-style-type: none"> • Assess the level of security in critical networks and information systems using AKCESK's methodology for identification and classification of critical infrastructures and important information infrastructures. • Baseline report containing a baseline analysis of 3 pilot municipalities on: <ul style="list-style-type: none"> - The municipalities' critical information infrastructure assets; - The municipalities' ICT staff's capacity gaps • Draft a capacity building/training plan for the municipalities' ICT staff, on the basis of the capacity gaps identified in the baseline report. <p>Main Beneficiaries: <i>AKCESK and 3 pilot municipalities (Vlora, Lezhe and Berat)</i></p>
<p>Oct 2020 – Jan 2021</p>	<p><u>Senior Expert</u></p> <p>RISIALBANIA</p> <p>Mr. Andi Stefanllari Senior ICT Sector Manager andi.stefanllari@helvetas.org</p> <p>National Authority for Electronic Certification and Cyber Security (AKCESK)</p> <p>Dr. Vilma TOMCO General Director (E): Vilma.Tomco@cesk.gov.al</p>	<p>Albania</p>	<p>Funded Project "Developing Business Cases for Investments in Cybersecurity for the Private Sector", by Swiss Agency for Development and Cooperation.</p> <p>Build the capacity of key staff of NAECCS in developing business cases for the private sector to invest in information security solutions in compliance with Albanian regulations.</p> <ul style="list-style-type: none"> • Development of four business cases each covering private companies in the energy, health, and finance sectors, as well as for SMEs; • Capacity Building: Deliver training to NAECCS staff on developing similar cases in the future. <p>Main Beneficiaries: <i>AKCESK</i></p>
<p>1 June 2018 – 15 June 2020</p>	<p><u>Senior Expert</u></p> <p>Department for Development and Good Governance (Prime Minister Office)</p>	<p>Albania</p>	<p>IPSIS multi-donor trust fund financed by Sweden, Switzerland and EU, managed by the World Bank for the Government of Albania in support to the implementation of the Integrated Planning System. Team Leader, project management, consultancy</p>

	<p>Ms.Oriana ARAPI, General Director of Policy Development & Good Governance</p> <p>(E): oriana.arapi@kryeministria.al</p> <p>National Agency for Information Society</p> <p>Mr. Ilian SHAMIJA IPSIS Project Manager: (E): ilian.shamija@akshi.gov.al</p>		<p>and support (TA) for design, programming, development and implementation of e-government system, IPSIS (Automated Integrated Planning System Information System) and links strategic policy planning with the budget planning and public financial management more broadly, in the frame of supporting governance capacities (starting with 1000 users) to develop and execute Management Information Systems and implementing related e-governance and e-services for public and private.</p> <p>Main Beneficiaries: <i>Prime Minister Office, National Agency for Information Society, all first line Ministries and Agencies.</i></p>
23 July – 30 Sep 2018	<p><u>Senior Expert</u></p> <p>Regional School of Public Administration (RESPA)</p> <p>Beneficiary: National Authority for Electronic Certification and Cyber Security (AKCESK) Dr. Vilma TOMCO</p> <p>General Director (E): Vilma.Tomco@cesk.gov.al</p>	Albania	<p>Project "Support to ReSPA in its efforts to contribute to the Public Administration Reform under the EU integration process in the Western Balkans".</p> <p>Technical assistance on:</p> <ul style="list-style-type: none"> ▪ Review of Public Key usage and E-Governance Systems using Electronic Signatures in Albania; ▪ Analyze of case studies for advanced methods and technology of Electronic Signatures usage; • Design and preparation of a guideline report for government and civil society users based on recommendations for increasing the standards of service delivery for the usage of e-signatures and e-service in the public and private sector in Albania.
15 Sep 2016 – 15 Sep 2017	<p><u>Director of Information and Communication Technology</u></p> <p>Albanian Financial Supervisory Authority</p> <p>Ex-General Director Ms. Enkelejda SHEHI-PUSTINA (E): ledapustina@gmail.com</p>	Albania	<ul style="list-style-type: none"> • Planning, analysis, design, development, testing, implementation and maintenance of ICT infrastructure, platforms and software programs of Life and Non-life Insurance market in Albania. • Preparing technical specifications, design documentation and terms of references for tender procedures; • Preparation of operational and investment budget planning, projects monitoring, financial and resources management;

			<ul style="list-style-type: none"> • Preparation of capacity building/training plan, training and capacity building modules and technical manuals;
Oct 2007- Sept 2016	<p align="center"><u>Director of Information & Communication Technology Systems & Head of National Civil Registry</u></p> <p>Ministry of Interior General Directory of Civil Status Mr. Armand TELITI Ex-General Director (E): teliti_a@yahoo.it</p>	Albania	<ul style="list-style-type: none"> • Team Leader and project manager of “Modernization of the Address and Civil Registry Systems and Services” funding from several donors: Government of Norway (Statistics Norway), the Government of Austria (Ministry of Interior), Council of Europe, World Bank, OCSE and UNDP included management, coordination, progress follow-up and reporting of planning, analysis, design, development, testing, implementation and maintenance of the Albanian Civil Registry, Voter Register, Address System, Digitalization of Civil Status archives and capacity building of a network of 400 civil status offices and 250 urban offices, located all over the country, nearby Local Government Unit. • Team leader and co-managing in MoI for the project management, monitoring, evaluation and reporting of concessionary contract with Joint venture Sagem Securite (after Morpho and now Idemia) and AAEF managing, maintaining, developing and optimizing the infrastructure including the Production facilities (IT System integrated with other key National security systems, Data Center and PKI) and the remote Enrolment Centers (400 centers in peak time) with 700 staff in the central and remote Operation in compliance and referred to MoI contract requirements ratified by law in Albanian parliament. This task covers continuous corrective action plan, new systems planned to be implemented, in agreement with Contract requirements and International Standards (ISO, ICAO, ETSI ...)
22 Jan 2002 – 5 Oct 2007	<p><u>Head of Technical Support & Help Desk and System Administrator</u></p> <p>Albanian Mobile Communication (Now One Albania)</p>	Albania	<p>Main Responsibility:</p> <ul style="list-style-type: none"> ▪ Corporate ICT project management and coordination. ▪ Planning, analysis, design, development, testing, implementation & maintenance of ICT infrastructure, platforms of Telecom and Mobile services platforms.

			<ul style="list-style-type: none"> ▪ Preparing technical specifications, design document and terms of references for tender procedures; ▪ Preparation of operational and investment budget planning, projects monitoring, financial and resources management; ▪ Preparation of capacity building/training plan, training and capacity building modules and technical manuals;
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Membership in Professional Associations:

- Member of Management Committee of COST Action CA19122, European Network for Gender Balance in Informatics (2020 -2024)
- Member of Management Committee of COST Action CA22104 - Behavioural Next Generation in Wireless Networks for Cyber Security.
- Member of Management Committee of COST Action CA22168 - Physical layer security for trustworthy and resilient 6G systems (6G-PHYSEC) - Standardisation Coordinator
- Member of Management Committee of COST Action CA22137 - Randomised Optimisation Algorithms Research Network
- Member of Management Committee of COST Action CA 23147 - Global Network on Large-Scale, Cross-domain and Multilingual Open Knowledge Graphs

Publications and Conferences:

- Miranda Harizaj, Alfons Harizaj, Olgerta Idrizi, Vilma Tomco “Analysis and Potential Improvement of Software Fault Prediction Approaches”, Journal of Southwest Jiaotong University, Vol 58, No 4 (2023), Published: July 31, 2023 - Online ISSN: 02582724, <http://jsju.org/index.php/journal/article/view/1723>
- Miranda HARIZAJ, Olgerta IDRIZI “Optimizing Retailer’s Decision by the Use of Intelligence Control”, 10th International Scientific Research Congress, May 19-21, 2023, Mardin, Turkey, ISBN: 978-625-6404-50-2
- Miranda HARIZAJ & Igli BISHA “Integration in internet of things of electric vehicle charging infrastructure”, Engineering Applications (ENAP) Journal, v2. No.2. (2023) - Online ISSN: 2979-9201
- Miranda HARIZAJ, Olgerta IDRIZI, Alfons HARIZAJ, “Machine Learning Algorithms for Predicting Life Expectancy”, The 6th Advanced Engineering Days (AED), International Engineering Symposium, 5 March 2023, Mersin, Turkey, ISBN:978-605-72800-2-2.
- Miranda HARIZAJ, Arli Minga, Alfons HARIZAJ “Analysis of effective techniques and algorithms in terms of “text mining” to predict the authorship in Albanian language”, CIT Review Journal, ISSN: 2788-645X, May Issue 2022.
- Miranda HARIZAJ & Igli BISHA “A proposed power control solution for industrial application in decentralized energy production”, Engineering Applications (ENAP) Journal, v6. No.3. (2022) - Online ISSN: 2979-9201.
- Indrit Enesi, Miranda HARIZAJ, Betim Çiço, "Implementing Fusion Technique Using Biorthogonal Dwt to Increase the Number of Minutiae in Fingerprint Images", Journal of Sensors, Volume 2022, Article ID 3502463, 13 pages, 2022. <https://doi.org/10.1155/2022/3502463>
- Miranda HARIZAJ, Arjela NDREU “Living in “Smart Cities and Green World””, Smart Cities and Regional Development Journal, v6. No.3. (2022) - ISSN-L: 2537-3803, Online ISSN: 2821-7888.
- Vilma Tomco Miranda Harizaj, Argena Prendi, “A Simple Mechanism for controlling and reducing Malwares at

Network Level, preventing possible cyber incidents”, 5th Advanced Engineering Days (AED), International Engineering Symposium, Mersin, Turkey 3-5 Dec. 2022, ISBN:978-605-72800-0-8.

- Miranda HARIZAJ, Indrit ENESI “An Assessment of Advanced Techniques Application in Fingerprint Recognition and Identification System”, ICONSAD’22, December 2022, Turkey, ISBN: 978-605-73639-5-4.
- Cardoso, G.A., Scavarda, A., Adamu, V., Harizaj, M., Sellitto, M.A. A Sustainable Development Managerial Analysis of the Integration among Healthcare, Safety, Ergonomics, and Environment. In: et al. Production and Operations Management (2022).Springer Proceedings in Mathematics & Statistics, vol 391. Springer, Cham, ISBN: 978-3-031-06862-1_28.
- Indrit ENESI, Betim CICO, Miranda HARIZAJ, “Increasing quality in fingerprint images by Implementing wavelet transform based fusion technique”, CompSysTech '21: Proceedings of the 22nd International Conference on “Computer Systems and Technologies”, Ruse Bulgaria, 18- 19 June 2021, Pages 112–117, ISBN: 978-1-4503-8982-2, Best Paper AWARD.
- Dr. Miranda HARIZAJ, Arli MINGA, Dr. Vilma TOMCO, Dr. Alfons HARIZAJ, “Application of authorship identification model based on machine-learning for Albanian language”, Sixteenth Annual International Conference of the Alb-Science Institute,” THE ERA OF DIGITALIZATION AND ITS EFFECTS ON SUSTAINABLE DEVELOPMENT” Skopje, 01 - 03 October 2021;
- Dr. Miranda HARIZAJ, Igli BISHA, “Integration of Industry 4.0 in CNC Ethernet control systems”, Sixteenth Annual International Conference of the Alb-Science Institute,” THE ERA OF DIGITALIZATION AND ITS EFFECTS ON SUSTAINABLE DEVELOPMENT” Skopje, 01 - 03 October 2021;
- Maris Basha, Miranda HARIZAJ “Brain machine interfaces a solution for impaired people”, Proceedings of the 14-th International Conference in “Standardization, Prototypes and quality: A means of Balkan countries collaboration”, September 21 - 22, 2018”;

Language Skills:

Albanian (native), English (full professional proficiency) and Italian (proficient).
