







CURRICULUM VITAE

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PROFILE

Digital Transformation advisor and analyst, Project Manager, and Artificial Intelligence modeller. Has over 15 years of experience leading services and projects for public administrations and the tech industry across the European Union and Argentina. His career has been profoundly shaped by the high standards developed during more than a decade in Europe, working for a leading technological innovation organization with a significant impact on industrial, public, and scientific ecosystems.

He has honed expertise in IT project management and skills to interact with technical teams, driven by a strong commitment to teamwork and achieving meaningful objectives. During his tenure at CINECA, Italy, he designed and managed the Information Management Project for the European Space Agency. In Argentina, as a National Director (Strategic Management) at the Ministry of Modernization, he applied a comprehensive vision of state transformation, designing and delivering national-scale projects addressing macro-structural processes.

As Project Manager of the digital transformation of the National Institute of Public Administration in Argentina, he successfully achieved all goals within the project's timeline, scope, and budget. Additionally, he played a key role in project communications with the Office of the President and central government authorities, ensuring high visibility and flawless technical execution. He has advised the Minister, and his Secretaries of State on critical initiatives, offering a comprehensive perspective on the National Public Administration's digital portfolio. Furthermore, he served as National Coordinator of Cybersecurity Operations, contributing to safeguarding the country's digital infrastructure.

As an advisor to ARSAT, he has spearheaded digital transformation projects within the company's Administration Department, leading the development of management tools for numerous internal activities and their digital reporting to shareholders. He has specialized in designing performance monitoring systems for both public and private sectors, implementing methodologies to ensure the delivery of value through systems equipped with rigorous metrics.

On behalf of ARSAT, he was seconded to the Ministry of Health, where he designed the Telecommunications Satellite Infrastructure Project for Primary Healthcare in Argentina, benefiting 2000 centres across the country. Additionally, he was commissioned to the Office of the Chief of Cabinet of Ministers, where he designed the National High-Performance Computing Infrastructure Project, successfully securing approval from the World Bank.

He holds a robust academic background in Business Administration, coupled with advanced competencies in project management and financial accountability, honed through roles of responsibility in both the public and private sectors. As an expert in cost accounting, financial reporting, and budget management, he possesses in-depth knowledge of European regulations and standards for cost management.

Throughout his career, he has developed practical skills in requirements management, systems architecture, and systems engineering methodologies, enabling effective collaboration with technical teams on complex projects.

With a strong foundation in Physics and a commitment to staying abreast of emerging technologies, he combines theoretical and practical expertise in Artificial Intelligence and Deep Learning. His skill set includes advanced proficiencies in convolutional neural networks (CNNs), recurrent neural networks (RNNs), and large language models (LLMs). He excels at optimizing models and managing performance metrics and hyperparameters.

WORK EXPERIENCE

Artificial Intelligence Advisor and Professor - Civil Agent, Argentine Army, Buenos Aires, Argentina

November 2024 – present

Roles and Responsibilities:

- Professor of Digital Transformation and Artificial Intelligence at the General Directorate of Communications, IT, and Cyber Defense.
- Responsible for the Artificial Intelligence strategy.

Performed activities:

- Drafting of the Artificial Intelligence Strategy for Defense.
- Drafting of the Artificial Intelligence Implementation Plan.
- Drafting of the Software Development Plan for Artificial Intelligence.
- Advising on the preparation of Artificial Intelligence prototypes in local environments. Stakeholders involved: General Directorate of Communications, IT, and Cyber Defense of the Argentine Army. Ministry of Defense.

Advisor, ARSAT - Argentine Satellite Solutions Company S.A., Buenos Aires, Argentina

June 2018 – July 2024

Roles

- (2018 - 2020) Advisor and Project Manager in the Directorate of Administration and Finance.
- (2021) Advisor and Project Manager for the Ministry of Health client.
- (2022) Advisor and Project Manager in the Office of the Chief of the Cabinet of Ministers.
- (2022 - 2024) Advisor and Project Manager in the General Secretariat.

Projects

(2021 - 2022) Project Designer, Proposal Writer, and Negotiator for the National Last-Mile Connectivity and HPC Infrastructure Project with the World Bank.

Funds obtained (with the negotiation team): USD 200 million

Scope: Last-mile connectivity, HPC infrastructure in modular centres, training for technical roles

Performed activities:

- Conducted a needs assessment for last-mile connectivity nationwide and computing capacity for national universities, the scientific system, and the industrial sector.
- Developed a baseline with a multidimensional analysis, including a microeconomic analysis of value chains and a regional macroeconomic assessment.

- Evaluated the needs of various industrial sectors.
- Analyzed emerging technology adoption trends.
- Assessed computational needs for industrial and scientific clusters, covering institutions such as the National Atomic Energy Commission, the proton therapy project, bioinformatics, nuclear medicine, image processing, and the needs of the National Space Activities Commission (CNEA), the national meteorological agency, as well as the mining and lithium industries.
- Conducted gap analysis and project design.
- Created a strategic plan for HPC infrastructure installation.
- Defined the pricing policy for future data center services and developed a financial plan.
- Prepared the Project Plan, reporting plan, and Quality Assurance plan.
- Negotiated with key scientific and technological stakeholders, including the National Broadband Network Directorate, Data Center Directorate, PITBA Technology Hub, National Atomic Energy Commission (CNEA), National Space Activities Commission (CONAE), INVAP, Balseiro Nuclear Physics Institute, National Network of Radiotherapy Centers, and the National Proton Therapy Project.
- Negotiated with the funding entity, the World Bank, which fully approved the proposal.

(2021 - 2022) Designed and managed the “Satellite Connectivity 2022” project for the Ministry of Health, providing impact to 2,000 Primary Healthcare Centres (CAPS). Conducted a deep and detailed change management process both in ARSAT and the Ministry.

Secured funding: USD 10.4 million.

Scope: Deliver satellite connectivity to 2,000 Primary Healthcare Centres (CAPS) located in rural and remote mountainous areas with limited connectivity, identified in collaboration with the Ministry of Health.

Performed activities:

- Conducted a baseline assessment of connectivity across the national territory.
- Performed gap analysis to identify underserved areas.
- Drafted requirements for satellite connectivity bands (Ka or Ku) based on the geolocation of beneficiaries and the coverage footprints of available satellites.
- Collaborated on budget definition and engaged in contract negotiation and management.
- Planned, coordinated, and monitored operations with the terrestrial operations PMO for the installation and configuration of V-SAT antennas and the activation of satellite services, in close collaboration with ARSAT’s Satellite Operations Center PMO.
- Coordinated the development of custom software for project data management.
- Contributed to the implementation of a georeferenced dashboard to manage terrestrial installations and satellite service activations at each healthcare center, supervising its deployment with the technical operations team.

- Has organized and led the PMO. Applied Agile methodologies.
- Managed internal and external stakeholders, ensuring effective high-visibility communication.
- Engaged with oversight teams responsible for project reporting.
- Ensured the successful launch of services according to the schedule, even during global health crises, and within the assigned budget for the project's full scope.
- Conducted ex-post impact analysis (achieved social impact), gathering statistics and user feedback.
- Integrated operationally with the National Telemedicine System under the Ministry of Health.

Stakeholders Involved: The Ministry of Health of Argentina, the Ministry of Economy, the Office of the Chief of Cabinet of Ministers of the Presidency of Argentina, provincial Ministries of Health, and ARSAT (including the Data Center Directorate, the Administration and Finance Department, the Satellite Operations Directorate, and the Software Development Directorate).

(2018 - 2019) Project Manager – Design and Implementation of Enterprise KPI Monitoring Software

Scope: Monitoring of performance KPIs for the following areas: Administration and Control, Planning, Budgeting, Quality and Risk Management, and Ground Operations. Conducted a deep and detailed change management process both in the Administration and Finance Area of ARSAT.

Performed activities:

- Has organized and led the PMO. Applied Agile methodologies.
- Software Design and Development Management: Led the design and management of the software development process, ensuring the software met business requirements and technical standards.
- Requirements Definition and Data Collection Procedures: Defined the technical requirements for the system and established data collection procedures. Applied SYSML/UML architecture to ensure a robust and clear system structure. Managed the traceability of requirements and employed Business Process Modelling (BPM) to map out and optimize business workflows.
- Schedule Management: Oversaw the project timeline, ensuring that software development and implementation were completed on schedule and within scope.

Involved Stakeholders: Directors of the following areas: Administration and Control, Planning and Budgeting, Quality and Risk Management, Ground Operations, and the Data Center Directorate.

(2018 - 2020) Project Manager, Design and Implementation of the Software Monitoring System for New Projects

Scope: Monitoring the progress of new software projects for the Public Administration.

Performed activities:

- Has organized and led the PMO. Applied Agile methodologies.
- Design and management of software development: Oversaw the entire software development lifecycle, ensuring that all phases from concept to deployment were executed efficiently.
- Definition of requirements and data collection procedures: Defined functionalities for importing project data in various formats, with visualization and periodic updates. Included integration for data upload into the National Projects Dashboard.
- Timeline management: Managed the project schedule to ensure the timely execution of each project phase, meeting deadlines and ensuring smooth transitions between project milestones.

2019 - 2020) Project Manager, Design and Implementation of the Data Center Cost Analysis System

Scope: Development of an accounting system for cost management at the National Data Center.

Performed activities:

- Design of Analytical Accounting: Developed a comprehensive accounting framework covering direct costs, indirect costs, cost centers, and cost allocation methodologies.
- Design, development, and management of the cost accounting system: Led the design, development, and implementation of a tailored cost accounting system for the Data Center business unit, ensuring it met all operational and financial reporting requirements.
- Timeline management: Managed the project schedule to ensure timely delivery and successful implementation. The system received approval from the Director of the Administration Area.
- Has organized and led the PMO. Applied Agile methodologies.

(2019 - 2020) Project Manager, Design and Implementation of the Pricing System for Data Center Services

Scope: IT pricing system module for Data Center services.

Performed activities:

- Definition of the pricing policy for Data Center services.
- Design and management of the software development for the implementation of the pricing module.

(2018 - 2019) Project Manager, configuration and installation of the corporate e-learning system (Quality Management team)

Scope: Training in quality management for staff.

Performed activities:

- Design of the online training service.
- Supervision of the production of audiovisual content.
- Management of the configuration of the edX platform.

- Management of the delivery of the training service through the platform.
- Has organized and led the PMO. Applied Agile methodologies.

(2018 - 2019) Other management activities:

- Chief Risk Officer: Operational Risk Management; monitoring the National Optical Fiber Network and Satellite Anomalies.
- Preparation of risk indicators and measurement of the Enterprise Risk matrix.

Cybersecurity Operations Coordinator, Secretariat of Infrastructure and Digital State, Ministry of Modernization, Presidency of the Nation, Buenos Aires, Argentina

Ad hoc position from January 2018 to May 2018

Performed Functions

Development of National Cybersecurity Strategy and Policies: Designed the country's cybersecurity strategies and policies, ensuring compliance with international digital security standards.

Data Management for Baseline in Critical Infrastructures: Supervised the collection of data to establish a cybersecurity baseline across various critical infrastructures, including nuclear plants, airports, military and government installations, ARSAT (the national telecommunications company), hydroelectric power plants, and control systems.

Project

(2018) Design of the IT Architecture for the Cybersecurity Data Management System for the Central Public Administration

Project Description: High-Level Design (HLD) for a data management software system, developed as part of a broader cybersecurity protection system for a data center. This design was based on requirements established in 2017 and received approval from the United Nations Development Programme (UNDP).

Scope: Designing the architecture for the data management component within the cybersecurity information system, with a particular focus on safeguarding the data center against cyberattacks and ensuring comprehensive data management.

Performed activities:

- Operational and Functional Requirements Implementation: Ensured the application of both operational and functional requirements in the system design and deployment.
- Cross-Team Collaboration: Worked closely with architects, developers, and SOC (Security Operations Center) and CERT (Computer Emergency Response Team) leaders to ensure alignment across teams.
- Architectural Implementation: Developed and implemented an architecture representing the relationships between business processes, cybersecurity strategies, and infrastructure systems.

- Model-Based Systems Engineering (MBSE): Applied MBSE methodology, enabling automated verification of traceability matrices between functional and non-functional requirements, end-to-end Modelling, and specification tracking. Utilized modelling languages such as UML (Unified Modelling Language), SYSML (Systems Modelling Language), and BPMN (Business Process Model and Notation).
- CMMI-Compliant Documentation: Produced documentation conforming to Capability Maturity Model Integration (CMMI) standards to ensure quality and process improvement.
- Cost Evaluation and Quality Assurance (QA): Conducted detailed assessments of development costs and implemented QA processes to ensure the reliability and performance of the system.

Involved Stakeholders: United Nations Development Programme (UNDP): Provided approval and oversight for the project design, ensuring alignment with international standards. Ministry of Modernization: Responsible for coordinating the adoption and implementation of cybersecurity initiatives across the public administration. Cybersecurity Technical Teams: Contributed expertise in managing and safeguarding critical infrastructure from cyber threats. Software Architecture and Development Teams: Played a key role in designing and building the data management system architecture. Data Center Team: Focused on ensuring the system's integration and effectiveness in protecting the data center from cyberattacks.

***National Director: Strategic Management Coordinator. Unit: Minister's Cabinet, Ministry of Modernization, Presidency of the Nation, Buenos Aires, Argentina
March 2016 – June 2018***

General Activities Performed:

- Actively participated in developing and implementing the national Digital Agenda.
- Provided strategic advice to three State Secretariats: Administrative Modernization, Human Resources, and Public Innovation.
- Contributed to the implementation of the National Project Monitoring Dashboard, focusing on the collection, harmonization, and analysis of data from central government administration sources.
- Leadership in Cultural Initiatives: Directed the design and execution of the cultural project “Teatro Visual” to promote the value and culture of digital transformation through participatory audio-visual productions, showcased at Tecnópolis in 2016.
- International Collaboration on e-Health: Organized international activities, including facilitating the visit of the State Secretary of the Ministry of Modernization (Public Innovation) to CINECA (Bologna, Italy) to explore potential collaborations in the field of e-Health in 2016.

Projects

(2016–2017). Project manager: "Digital Center of the National Institute of Public Administration (INAP)"
Objective: Provide online training for 100% of public administration personnel, totalling 208,000 employees. Collaborated with a deep and detailed change management process in the National Institute.

Scope: Development and implementation of a digital training platform to enhance the skills of public administration employees.

Performed activities:

- Gap Analysis: Conducted an in-depth analysis of INAP's digital services to identify deficiencies and opportunities for improvement.
- Platform Requirements and Design: Defined functional and technical requirements for the Capacitación-INAP e-learning platform. Designed its architecture using SYSML/UML, ensuring clear traceability between requirements and implementation.
- Platform Functionalities: Integrated with career credit management systems, addressing hierarchical roles within the public administration.
- Enabled course registration via a user-friendly portal.
- Supported online course delivery and learning progress monitoring.
- Offered comprehensive analytics for e-learning outcomes.
- Software and Content Development Coordination: Managed the software development process and the production of high-quality digital training content.
- Infrastructure Setup: Oversaw the preparation of IT infrastructure, including servers, databases, load balancing, and network services. Coordinated the deployment of the platform in the datacenter for production use.
- Earned Value Management: Utilized Earned Value Management (EVM) techniques to monitor progress, generate corrective action reports, and mitigate project risks effectively.
- Has organized and led the PMO. Applied Agile methodologies.

This project delivered a robust e-learning system, streamlining professional training for Argentina's public administration workforce.

Stakeholders Involved: Instituto Nacional de Administración Pública (INAP), Ministry of Modernization, Secretary of Public Employment, Datacenter Technical Teams.

(2017) Requirements Management for Cybersecurity Discovery Software System for Central Government

Scope: Functional requirements.

Performed activities:

- Study of Data Sources, Formats, and Data Collection Functionalities: Analyzed the sources of data, their formats, and functionalities, including data collection, discovery, incident detection, proactive and reactive protection policy management, risk and incident management, and real-time visualization.
- Analysis of Data Center Infrastructure Needs: Evaluated the infrastructure requirements for the Data Center to ensure proper alignment with the cybersecurity system's needs.
- Identification and Documentation of Technical Requirements for Future Development: Identified and documented the technical requirements for the continued development of the system.
- Collaboration with Architects, Software Developers, and NOC, SOC, and CERT Teams: Worked closely with architects, software developers, and teams responsible for Network Operations Center (NOC), Security Operations Center (SOC), and Computer Emergency Response Teams (CERT).
- Application of Model-Based Systems Engineering (MBSE): Applied MBSE methodologies, enabling automatic verification of traceability matrices between different requirements, end-to-end modelling, and tracking of specifications.
- Cost analysis of development and Quality Assurance.

Stakeholders Involved: United Nations Development Programme (UNDP), ARSAT Data Center, Ministry of Modernization, Cybersecurity Technical Teams, Software Architecture and Development Teams. The requirements were approved by the United Nations Development Programme (UNDP).

(2016 - 2017) Requirements Management for the National Digital Projects Dashboard System of the Public Administration.

Scope: Monitoring the progress of digital transformation projects across the Public Administration, covering 100% of digital projects (over 150) within the central public administration (at the level of subsecretariats, secretariats, and ministries).

Performed activities:

- Collaboration in the high-level design of the system.
- Key functionalities: management by ministry and department, budget management, accountability procedures with advanced cost allocation features, schedule management, Earned Value Management (EVM), project correction alerts, and associated risk management.
- Periodic updates and visualizations for project tracking.

Stakeholders involved: Ministry of Modernization Office of the Chief of the Cabinet of Ministers.

***Independent consultant: IT projects management, technology transfer. Buenos Aires, Argentina
January 2013 – February 2016***

Clients and Projects:

Catholic University of Córdoba, Argentina: Development of a technology transfer plan for the industrial sector (IT, robotics, energy).

Blas Pascal University, Córdoba, Argentina: Development of an e-learning plan.

Independent Development: Design and development of a software system for data protection, including user management, creation, deletion, and modification of data, administration of data processing activities, and management of process standards throughout the data processing lifecycle.

ICDA Business School: Consulting and innovation courses.

University of Reading, UK: Research in innovation and proposal writing for the European Union.

(2003 – 2012) Technologist and Project Collaborator, CINECA National Italian Supercomputing Center, Consorzio Interuniversitario, Bologna, Italy

(2003 – 2010) Technologist, CINECA Consorzio Interuniversitario, Bologna, Italy

(2011 – 2012) Project Collaborator, CINECA Consorzio Interuniversitario, Bologna, Italy

General activities performed:

- Participated in research activities on knowledge management and data analysis.
- Collaborated in the design and development of prototypes for information management applied to knowledge base analysis using various techniques.
- Contributed to proposal writing and communication with partners for European projects on virtual museums, science, and cultural heritage.
- Supported the management of several scientific and cultural support projects, as well as IT projects funded by the European Union, including project management activities and reporting.
- Contributed to the management of information management projects.

Project: (2004 – 2007) Information Management for the European Space Agency (ESA)

Budget Obtained: €0.4 million

Activities Performed:

- Managed the contract signing and project planning.
- Has organized and led the PMO. Applied Agile methodologies.
- Coordinated operational deployment with various project stakeholders.
- Monitored the progress of operations in collaboration with technical profiles and provided regular reporting to the client.

- Prepared deliverables and managed documentation of project outputs.
- Managed project communications through presentations to expert groups, representing the client.

Stakeholders Involved: European Space Agency (ESA) – Chief Financial Officer, Director of Information Management, Director of Process Area.

Other activities

- Applied executive analytical methodologies and IT innovation analysis skills as a Gartner EXP client. Presented CINECA projects and collaborated with Gartner managers to secure invitations for showcasing CINECA at European Gartner events.
- Contributed to presenting CINECA projects at international events, including Gartner Symposiums and Summits on Portals, Collaboration and Content Management, and Knowledge Management. Participated in the Higher Education Summit, featuring CINECA projects in peer-to-peer work sessions.
- Represented CINECA at the Gartner Defense Technologies Summit in 2005 and 2006, presenting its information analysis technologies.
- Served as a business mentor/tutor for two Master's theses in Innovation Engineering at the University of Bologna.
- Collaborated on strategies for the international expansion of the e-learning project "L2L."
- (2009–2012): Developed international public relations to facilitate collaboration agreements in e-learning. Organized visits for senior leaders of Universidad Blas Pascal (Córdoba, Argentina) to CINECA's headquarters in Casalecchio di Reno, Italy (2012).
- (2010–2013): Strengthened international relations to explore potential collaborations in Health Information Systems and information management. Coordinated meetings with the Ministry of Health of Argentina, Universidad Católica de Córdoba, and Clínica Reina Fabiola, alongside CINECA experts. Facilitated partnerships with Argentina's National Atomic Energy Commission (CNEA), National Space Activities Commission (CONAE), satellite technology and medical physics company INVAP, Balseiro Institute (scientific computing), and oil and gas company YPF.

EXPERIENCE AS AN UNIVERSITY PROFESSOR

(2007, 2008): Volunteered with the University of Bologna, Italy, as a business tutor at CINECA for two Master's theses in Innovation Engineering.

(1989–1995): Lecturer in Physics and Mathematics at the Faculty of Exact Sciences, National University of Catamarca, Argentina.

(1987–1996): Lecturer in Physics and Mathematics at FAMAF (Faculty of Mathematics, Astronomy, and Physics), National University of Córdoba, Argentina.

CERTIFICATIONS

Professional Certificate in Architecture and Systems Engineering, Complex Systems.

(2016 -2017) Massachusetts Institute of Technology (MIT), (d.I.), USA.

Certified Development Project Manager

(2014) PM4DEV Academy, Atlanta, (d.I.), USA. PM4DEV is PMI-compliant.

PM4DEV es Registered Education Provider (R.E.P.), approved by the Project Management Institute (PMI)

<https://www.pm4dev.com/elearn/cdpm.html>

UNIVERSITY LEVEL EDUCATION

Bachelor's Degree in Physics

(1981–1986) National University of Córdoba, Argentina

Executive Master in Finance, Administration, and Control (EMAFc)

(2007) Bologna Business School, University of Bologna, Italy

Topics: International Accounting Principles, International Financial Reporting, Analytical Accounting with Cost Centers (Direct and Indirect Costs), Overheads and ABC Costing, Accountability and Control, Advanced Budgeting Techniques, Management of Companies and Corporate Groups, Corporate Finance

Master in Business Administration (MBA)

(2004–2005) Bologna Business School, University of Bologna, Italy

OTHER PROFESSIONAL COURSES

Project Management

Effective Project Management

(2014) PM4DEV Academy, Atlanta, (d.I.), USA. PM4DEV is PMI-compliant.

Fundamentals of Project Management

(2014) PM4DEV Academy, Atlanta, (d.I.), USA. PM4DEV is PMI -compliant.

Project Design, Monitoring and Evaluation

(2014) PM4DEV Academy, Atlanta, (d.I.), USA. PM4DEV is PMI-compliant.

Adaptive Project Management

(2014) PM4DEV Academy, Atlanta, (d.I.), USA. PM4DEV is PMI-compliant.

European Research Projects Management, (2003) Polytechnical Universtiy of Madrid, Spain.

Technology

Professional Certificate in Architecture and Systems Engineering, Complex Systems.

(2016 -2017) Massachusetts Institute of Technology (MIT), (d.I.), USA.

Key Technical Expertise: Model-Based Systems Engineering (MBSE): Advanced experience with system modelling methodologies and frameworks.

SysML (Systems Modelling Language): creating and managing functional and structural system models.

Functional Requirements: identifying, documenting, and validating.

Standard Documentation: Expertise in producing technical documentation that adheres to industry standards.

Systems Architecture: Design and implementation of scalable, modular system architectures.

Technical-Economic Trade-Off Analysis: calculating and resolving trade-offs to optimize system performance and cost-efficiency.

Design Matrices: creating and applying design matrices for structured decision-making and traceability.

Artificial Intelligence: Postgraduate Course in Neural Networks

(2023) FAMAF-UNC, National University of Córdoba, Argentina

Achieved a grade of 10/10.

Course Topics:

Mathematical models of neurons;

Non-linear dynamic systems;

Machine Learning;

Feed-Forward and Recurrent Neural Networks (RNNs);

Deep Learning, Gradient Descent optimization;

Architectures: Convolutional Neural Networks (CNNs), Recurrent Neural Networks (RNNs), Encoders, Transformers, and Large Language Models (LLMs);

Hyperparameter optimization and precision management.

Tools Used: PyTorch, TensorFlow, Keras, NumPy.

Academic Project: *"Using Convolutional Neural Networks for the Automatic Classification of Large Image Datasets. Determining Requirements and Resources for Processing Large Collections."*

University Diploma in Python (advanced)

(2023) Universidad Tecnológica Nacional (UTN), Buenos Aires Faculty, Argentina.

Enterprise Architect Modeller

(2014) Sparx Systems India (d.I.).

Courses and Diplomas in Multidimensional Context Analysis for Proposal Writing, Project Negotiation, and Stakeholder Management

Diploma in Public Administration

(2017) *San Andrés University, Buenos Aires, Argentina*

Specialization in program and project management for public administration organizations and entities.

Non-Profit Boards Management

(2017) *Kennedy School, Harvard University, Distance Learning, USA*

Key competencies developed: Negotiation strategies for creating public value.

People and Society

(2015) *University of Oxford, Distance Learning, UK*

Key competencies developed: Analysis of social trends.

Social Entrepreneurship

(2014) *University of Oxford, Distance Learning, UK*

Key competencies developed: Theory of Change, impact metrics.

Ongoing post graduate courses (Technology, Computing and Artificial Intelligence)

Software Design for Scientific Computing

(2024) Faculty of Mathematics, Astronomy, Physics, and Computer Science; National University of Córdoba, Argentina

Status: Ongoing

MICROSCOPYC: Co-author of an academic, scientific, and technological research project:

Objective: Analysis and classification of microscopic images in Medical Physics to support cancer treatment through radiotherapy.

Methods: Incorporates morphological cell comparisons using Convolutional Neural Networks (CNNs) and advanced image processing techniques.

Impact: Defined technical requirements to scale the analysis for handling large datasets.

Context: Developed as part of a postgraduate course.

Automatic Analysis of Meteorological Satellite Images

(2024) Faculty of Mathematics, Astronomy, Physics, and Computer Science; National University of Córdoba, Argentina

Status: Ongoing

Co-author of an academic, scientific, and technological research project.

Objective: Analyze and classify satellite images to identify atmospheric elements (clouds, smoke) and surface features (forests, wildfires, crops).

Methods: Utilized Convolutional Neural Networks (CNNs) and advanced image processing techniques.

Impact: Defined operational requirements for scaling to handle large datasets.

Text Mining

Deep Learning in text: Metrics for “answer extraction”

(2024) Faculty of Mathematics, Astronomy, Physics, and Computer Science; National University of Córdoba, Argentina

Status: Ongoing

Evaluation of Artificial Intelligence Tools

Author: Academic, scientific, and technological research project:

“Evaluation of the MAMBA Recurrent Neural Network for Answer Extraction with NLP: A Comparative Study with LLMs (CHAT-GPT 4 and BERT) Using Metrics and Benchmarks to Analyze Computational Performance in 'Answer Extraction' Activities Across Different Environments.”

Partial Differential Equations: Analytical and Numerical Methods

(2024) Faculty of Mathematics, Astronomy, Physics, and Computer Science; National University of Córdoba, Argentina

Status: Ongoing

Author of the Academic, Scientific, and Technological Work, ongoing:

“Numerical solution of partial differential equations for the air fluid dynamics in the machine room of a data center for application in Energy Efficiency Management.”

Phase 1: Solution in two dimensions using local computational resources.

TERTIARY LEVEL EDUCATION

Professor of Philosophy and Education Sciences

(1986–1992) Catholic Institute for Professorship, Córdoba, Argentina

Topics: Education Sciences, Psychology, Team dynamics, Didactics.

LANGUAGES

English: advanced, Level C1

Italian: advanced, Level C1

Spanish: native, Level C2

French: intermediate, Level B1/B2

SKILLS

Project Management skills

- Project Lifecycle Management: Oversaw all stages of project management, including initiation, planning, execution, monitoring, reporting, and closure, utilizing tailored methodologies based on project needs and nature:

- PMP Methodologies: Applied PMBOK (Project Management Body of Knowledge) and waterfall design.
- Prince2 Methodologies: Process-oriented project management approach.
- Agile Methodologies: Managed IT projects using agile frameworks, particularly SCRUM.
- Operational Risk Management: Implemented robust risk management practices.
- Stakeholder Management and Engagement: Ensured effective communication with stakeholders at all levels, from technical teams to C-level executives and government officials. Leveraged technical expertise to align with technical teams while utilizing advanced management skills to build strong relationships with project partners and clients.
- Administration, Finance, and Control:
 - Analytical accounting based on national (Italian) and international principles (International Accounting Standards, Financial Accounting).
 - Digital reporting integrated with ERP systems to monitor financial performance and conduct advanced analyses.
- Compliance Management: Ensured adherence to national and European regulations.
- Impact Analysis:
 - Monitored projects and analyzed short, medium, and long-term impacts.
 - Applied frameworks such as the Logical Framework, Theory of Change/Intervention Logic, and Results Matrix for internationally funded projects.
- Strategic Planning and Negotiation:
 - Demonstrated expertise in strategic thinking, roadmap development, and negotiating action plans for high-impact projects.

Analytical Skills in Digital Transformation:

- Digital Transformation: Proficient in methodologically rigorous consulting tools for analyzing the lifecycle of innovations and scenarios for technology adoption. Experienced as an EXP Gartner client, contributing to technological implementation projects, process digitization, and organizational change.
- Strategic Technology Adoption Tools: Skilled in applying strategic methodologies with precise metrics to evaluate and adapt new technologies to meet institutional needs in both public and private sectors.
- Multidimensional Optimization of Innovation Proposals: Capable of analyzing and optimizing innovation options based on business plans, emerging trends, financial analyses, and market needs.
- Innovation Lifecycle Management: Comprehensive understanding of managing the entire lifecycle of innovations, from ideation to diffusion, with a focus on continuous adaptation.
- Microeconomics and Market Analysis: Expertise in the economic analysis of innovations, including market evaluations and benchmarking comparisons of innovations and their key stakeholders.

Skills in ICT methods and tools

- MS Office: Word, Excel, PowerPoint, MS Project, Visio, Publisher
- Tableau
- Repositories Git, GitHub
- IDEs: Visual Studio Code, PyCharm, integrated with Git and GitHub
- Knowledge of Unix OS
- Design Patterns, Testing and profiling in Python
- Scientific computing with Python and Julia
- Jupyter Notebooks, Anaconda, Google Collaboratory Pro
- LaTeX Editor, Markdown Editor
- Basic knowledge of SQL
- Requirements Management and traceability with Enterprise Architect, Zachman Framework.
- Business Processes Modelling with BPMN, Basic knowledge of Enterprise Architecture

Skills in Artificial Intelligence and computing

- Design and Optimization of Deep Learning Architectures
- Programming Expertise for Numerical Calculations and Deep Learning: Skilled in Python, Julia, Numpy, TensorFlow, Keras, PyTorch, Torchvision, Scikit-learn, Seaborn, and Matplotlib for developing algorithms.
- In-depth Knowledge of Neural Network Fundamentals: Strong theoretical foundation in neural network models derived from Physics, Mathematics, and Computer Science, including expertise in dynamic systems and hyperparameter optimization.
- Mathematical Foundations of Tensors in Deep Learning
- Numerical Simulations for Computational Physics, Proficient in solving partial differential equations and related systems. Numerical Computation with JAX
- Algorithm Development and Software Design: Specialized in automatic image processing and classification.
- Requirements Management with Model-Based Systems Engineering (MBSE): Expertise in Enterprise Architecture, UML, SysML, and trade-off resolution for complex systems.

Skills in communication and teaching:

Professor; didactical skills; Design of learning experiences. Coaching.

REFERENCES

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