CURRICULUM

Pablo César García Briosso

Professional profile

R&D Director, well known software architect, data Science and Deep Learning professor, technology events speaker.

Work Experience

Director of R+D - Urudata S.A.

April 2024 – present

Tasks carried out:

- Training of the R+D team.

- Development of AI-based products.

- Analysis of large volumes of data (e.g. development of IMM OD matrices based on telephony and public transport data)

- Development and implementation of AI and machine learning models.

- Analysis of large volumes of data.

Data Technology Manager – BCI Corporation, Chile.

November 2018 – March 2024

Tasks carried out:

- Training of data engineering and data strategy teams.

- Implementation of a data-centric strategy for the organization.

- Migration of legacy systems to big data technologies in the cloud.

- Leadership of the change from a traditional datawarehouse-based organization to a datalakehouse model, with decision-making based on real-time data, with dataops and mlops processes.

- Responsible for 11,000 daily data processes and annual budget of 10mm USD in development and operation of data and models.

Research Manager and Chief Architect – Telefónica I+D, Chile.

December 2014 – October 2018

Tasks carried out:

Training of research and development teams.

Development of research, models, data analysis and products in:

Copper mining

Precision agriculture

Smart cities.

Development of data analytics products and Internet of Things systems in agriculture, mining and smart cities verticals.

In four years, we obtained 15 patents, published 43 academic papers and created 8 products for the company.

Among the activities of the center, I am co-founder of the data Science institute of the Universidad del Desarrollo.

Developers & Architects Evangelist, Principal Platform Architect – Microsoft.

November 2006 – November 2014

Tasks carried out:

Design of mission-critical systems for large customers, particularly in the areas of databases, data warehouse, and big data.

Leadership of cloud adoption and migration processes in large corporate customers.

Dissemination of good architecture practices for enterprise architects and large clients.

Design of enterprise architecture strategies to promote business growth from technology.

Technology Manager – Urudata.

May 1994 – November 2006

Tasks carried out:

Implementation of technological projects.

Software product development.

Implementation of data analysis systems.

Design and implementation of data networks.

Technical support to customers in critical incidents.

Systems Manager – Oriental Advertising.

May 1991 – April 1994

Tasks carried out:

Development of management systems.

Computer animation.

Systems monitoring.

Head of O&M and Systems – SIL SA.

June 1986–April 1991

Tasks carried out:

Development of industrial factory systems.

Programming of automation and industrial machines.

Implementation of MTM-based production standards.

Industrial plant supervision.

Teaching experience

1992 – 1994 Professor of Microsoft Technologies, The Academy of Computing

1994 – 1996 Academic Secretary of The Academy of Computing (Microsoft Technical Training Center)

2007 – 2012 Guest Professor at Systems Integration Workshop and Software Engineering Project, INCO, UDELAR

2008 – 2011 Professor of Architecture, ORT University

2010 – to date, Professor of Programming, Data Structures and Algorithms, master's degree in bioinformatics, FQuim, UDELAR

2021 – 2024 Professor of master's degree in data science, University of Montevideo, subjects; Introduction to Data Science, Deep Learning and Data Ethics and Algorithms Workshop.

2025 – to date, Professor of AI for Executives at ORT University

2022- to date, FQUIM, UDELAR; professor of Deep Learning applied to the design of bioactive compounds.

2015 – 2018 Member of the Advisory Board and Co-founder of the Institute of Data Science, Universidad del Desarrollo (Chile)

Landmark projects

Constitutional plebiscite 1996

Implementation of the infrastructure of servers, procedures and communications of the constitutional plebiscite of 1996. This plebiscite is particularly remembered for the speed in the delivery of the primary count data and for having been the 2nd electoral act at the international level with transmission of the results in real time through the internet.

Reengineering of Santander Bank's Payment Channels, 2003.

Redesign, development and production of the electronic payment channels of Banco Santander de Chile.

Implementation of the Future Branch, Banco de Chile, 2014

Solution design of a futuristic solution, using multitouch devices with up to 10 points of interaction with smart tables and panels for bank users to interact with their information in a futuristic environment, within the Anacleto Angelini innovation center of the Pontificia Universidad Católica de Chile.

Fight against the lobesia botrana plague, 2018:

Design, experimental validation and obtaining of an industrial patent, of a trap of lobesia botrana moth (grape pest) that traps the larva before winter, allowing it to be sterilized by UV radiation and release sterile moths the following spring, drastically reducing the population of the pest.

Irrigation optimization in precision crops

Design of a (patented) irrigation system for precision crops based on the use of multifrequency capacitors to estimate the tree's water bulb and in kriging zoning from observation with cameras in the near-infrared spectrum.

Optimization of energy consumption in the wet grinding of copper.

-   Design of a clustering algorithm (patented) to detect steady states in energy consumption in the wet grinding cap of copper mining, giving configuration recommendations to operators of ball mills, shovels and managers of intermediate storage piles and conveyor belts.

Implementation of a "data-centric" organizational model.

Assembling the data strategy and data engineering teams of BCI bank, and leadership in the migration of legacy systems to a data lake house in the cloud, using Microsoft Azure, implementing an operation (team of 153 FTEs under my charge plus external collaborators) based on dataops and mlops, with data and models operating in real time, On a platform based on Delta files, which allowed generating an organization that makes decisions based on data, constantly experiments, achieving very high efficiency, with a development time and move to production of data solutions of 19.5 days and a time of 2.4 seconds from the time a data enters the bank, a set of Machine Learning models are applied, until it is received by one of the organization's partners, building a robust real-time data ecosystem. The data budget it managed was over $10 million, $5 million in cloud big-data infrastructure alone.

Development of origin-destination matrices for the IMM, 2024.

The population movement matrices obtained by Antel from telephony data and the matrices generated by the IMM from the movement of the GPS of the buses and the use of the public transport card were unified, using probabilistic assignment kernels, achieving that both products generated with different spatiotemporal resolutions, They coincided, allowing the city to have an EOD (origin and destination survey) every hour, instead of an annual survey every 10 years, generating a very accurate tool for urban planning.

Academic studies

2015 – Post graduated certificate in soil design, Universidad Andrés Bello

2012 - 2014 Master in bioinformatics, UDELAR

2010 – 2011 Post graduated certificate in Bioinformatics, UDELAR

2007 – 2008 Master in computer science, CPAP, UDELAR

2006 – 2007 Post graduates certificate in computer science, CPAP, UDELAR

1986 – 1988 Systems analyst, UDELAR

1985 – Bronze Medal, 1st ibero-american olimpics of mats.

Professional certificates

2024 – Microsoft Certified: Azure Administrator Associate

2024 – Microsoft Certified: Azure Solutions Architect Expert

2024 – Microsoft Certified: Azure Network Engineer Associate

2024 – Microsoft Certified: Azure Virtual Desktop Speciality

2022 – Microsoft Certified: Devops Engineer Expert

2022 – Microsoft Certified: Security, Compliance and Identity Fundamentals

2021 – Microsoft Certified: Azure Developer Associate

2021 – Microsoft Certified: Azure Data Scientist Associate

2021 – Microsoft Certified: Azure AI Engineer Associate

2021 – Microsoft Certified: Power Platform Fundamentals

2021 – Microsoft Certified: Azure Data Fundamentals

2021 – Microsoft Certified: Azure Fundamentals

2020 – AWS Certified Practitioner

2020 – BCI, especialista en riesgo Bancario

2015 – PMI AGP (Agile profesional)

2008 – Microsoft Certified Technologist, Biztalk Custom Applications

2008 – Microsoft Certified Technologist, .net Framework

2007 – Microsoft Certified Technologist, Windows Mobile

2006 – Microsoft Certified IT Professional: Database Developer

2006 – Microsoft Certified IT Professional: Windows Developer

2006 – Microsoft Certified IT Professional: Web Developer

2006 – Microsoft Certified IT Professional: Enterprise Applications Developer

2006 – Microsoft Certified Technology Specialist, SQL Server

2006 – Microsoft Certified Technology Specialist, .net Framework windows applications

2006 – Microsoft Certified Technology Specialist, .net framework distributed applications

2006 – Microsoft Certified Technology Specialist, .net framework web applications

1999 – Microsoft certified systems engineer

1999 – Microsoft certified database administrator

1997 – Microsoft cetified professional + internet

1997 – Compaq Accredited Systems Engineer.

1997 – Microsoft certified systems engineer, windows NT

1997 – Motorola ISG networking systems engineer.

1995 – Microsoft certified solutions developer.

1995 – Motorola ISG certified (voice networks, SNA networs, tcp/ip networks)

1994 – Microsoft certified professional

1992 – REFA, MTM certified professional

Languages

- Spanish: native
- English: proficient
- Portuguese: proficient
- French: still learning

Contact Information:

E-mail: personal: pcgarcia@windowslive.com, corporate: pcgarcia@urudata.com

CI Chile: 23862849-0

Cel: +569 7889 4880