

MARCO ANTONIO GONZALEZ JUNIOR

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PROFESSIONAL SUMMARY

Seasoned Solutions Architect with over 15 years of experience in designing and implementing large-scale systems and cloud-native solutions. Proven track record of leading cross-functional teams and delivering innovative, high-performance, and scalable solutions for the finance, retail, and e-commerce sectors. Strong expertise in AWS cloud architecture, microservices, and data-driven decision-making. Adept at aligning technology with business goals and driving continuous improvement across development teams.

EDUCATION

Faculdade de Informática e Administração Paulista	São Paulo
MBA Data Science	2015 2016
Faculdade Impacta de Tecnologia	São Paulo
BS Information Systems	2011 2015
Universidade Federal de São Carlos	São Carlos
BS Materials Engineering	1996 2000

SKILLS

Engineering background:	Scientific method, Calculus, Algebra, Physics, Statistics
Cloud Computing:	Amazon Web Services, Azure, Google Cloud Platform, Serverless Architecture, Event-Driven Design
Architecture Governance:	Decision Frameworks, Technical Debt Management, Review Processes
Enterprise Integration:	Event Sourcing, CQRS, Saga Pattern, Domain-Driven Design
DevOps:	Docker, Kubernetes, Terraform, Packer, GitHub Actions, ArgoCD, Helm, Jenkins, Ansible, GitOps Workflows
CI/CD Pipelines:	Advanced Deployment Strategies, Pipeline Security, Build Automation
Observability:	Prometheus, Grafana, Jaeger, OpenTelemetry, Datadog, ELK Stack, Grafana LGTM Stack, Distributed Tracing, SLOs/SLIs, Error Budgets
Performance Engineering:	Load Testing, Caching Patterns, Distributed Systems Optimization
API Development:	RESTful Architecture, GraphQL, gRPC, WebSockets, API Gateway, OpenAPI/Swagger, Security, Rate Limiting, Versioning
Web Development:	Frontend (HTML5, CSS3, JavaScript), Backend, Performance Optimization, SEO, Responsive Design, Web Accessibility, Progressive Web Apps
Web frameworks:	React, Next.js, Rails, Django, Flask, Express, Svelte
Programming languages:	TypeScript, Python, Go, Ruby, Java, Flutter, C++
Databases:	Relational, Key-Valued, Columnar, Graph and Document oriented
Data Science:	Data Wrangling, Analysis, Visualization, Big Data, Streaming Architectures, Statistical Modeling, ETL Pipelines, Data Lakes
Machine Learning:	Statistical Learning Theory, Algorithm Design, Model Optimization, Feature Engineering, Evaluation Metrics
Deep Learning:	PyTorch, TensorFlow, Keras, Neural Networks, Computer Vision, NLP, Transformers

CERTIFICATIONS

Amazon Web Services (AWS)	
Certified Solutions Architect Professional	2025
Certified Machine Learning Engineer	2024
Certified Machine Learning - Specialty	2024
Certified AI Practitioner	2024
Certified Solutions Architect Associate	2022
Certified Developer	2022
Certified Cloud Practitioner	2022
Stanford University and DeepLearning.AI	
Machine Learning Specialization	2024
Deep Learning Specialization	2024

IBM

IBM AI Engineering Professional 2024
IBM AI Developer Professional 2024
Generative AI for Software Developers 2024

University of Alberta

Software Design and Architecture Specialization 2024

University of Michigan

Statistics with Python Specialization 2019

Stanford University

Machine Learning (CS229) 2017

University of California, San Diego

Big Data Specialization 2016

University of Washington

Machine Learning Specialization 2016

Johns Hopkins University

Data Science Specialization 2015

University of Illinois at Urbana-Champaign

Data Mining Specialization 2015

Linux Professional Institute

LPI 101, LPI 102 2010

Sun Microsystems

Certified on the Java Platform: SCJA, SCJP, SCJD, SCWCD, SCBCD, SCDJWS, SCEA 2008

EXPERIENCE

Capco

São Paulo

Solutions Architect - Artificial Intelligence

Sep 2024 | current

As a Solutions Architect specializing in artificial intelligence and legacy modernization, I lead efforts to transform outdated systems using generative AI. By leveraging both commercial and open-source LLMs, I enable organizations to modernize their COBOL, Natural, PL/1, and other legacy applications into robust, microservices-based architectures in Java, TypeScript, and .NET. My work bridges the gap between legacy systems and cutting-edge technology, ensuring seamless transitions for clients.

Key contributions:

- Designed and fine-tuned LLMs, building Retrieval-Augmented Generation (RAG) systems for intelligent information retrieval.
- Developed a modernization toolkit of microservices for:
 - Code curation and crawling.
 - Comprehensive source code documentation and business rules extraction.
 - Graph database visualization for better component insights.
 - Generating modernized source code with automated tests and documentation.
- Designed a multi-cloud infrastructure using Terraform, Packer, and Kubernetes for flexible deployment on cloud or on-premises environments.

IBM

São Paulo

Senior Solutions Architect

Jul 2022 | Sep 2024

As a Consultant at IBM, I specialized in implementing and optimizing IBM WatsonX features for enterprise clients, delivering AI-driven solutions to meet business needs in the finance and retail sectors. My responsibilities included advising clients on best practices for integrating WatsonX's advanced machine learning, natural language processing, and analytics capabilities into cloud-native applications and solutions architecture. I collaborated with cross-functional teams to design and implement scalable AI strategies that enhanced operational efficiency, data-driven decision-making, and customer experience.

In this role, my main accomplishments were:

- Led comprehensive consultations from discovery to deployment, designing cloud-native AI solutions that addressed industry-specific challenges in finance and retail.
- Architected and implemented scalable WatsonX models within cloud-native environments to support high-availability systems and optimize performance in both sectors.
- Developed solutions architectures to integrate WatsonX AI capabilities with existing cloud infrastructure, ensuring seamless functionality and security.

- Provided clients with strategic recommendations on enhancing their AI and cloud strategies, enabling them to maximize the value of their data and technology investments.
- Delivered training and knowledge transfers on leveraging WatsonX tools for predictive analytics, customer insights, and fraud detection in finance, and personalized shopping experiences in retail.

banQi

Senior Solutions Architect

São Paulo
Jun 2019 | Jul 2022

As a Solutions Architect and Technical Lead, I led cross-functional collaboration with stakeholders to ensure that system architecture aligned with both the organization's strategic goals and the product vision. I unified architectural designs and drove technical decisions, ensuring scalability, sustainability, and efficiency throughout our systems. My work focused on delivering robust and effective solutions architecture, addressing complex business challenges while maintaining alignment with enterprise strategies.

In this role, my key responsibilities included:

- Evaluating, adopting, and advocating for new technologies to drive continuous innovation in architecture and development practices.
- Leading the design, development, and deployment of technical solutions that met high standards of performance, security, availability, and data integrity.
- Overseeing platform engineering efforts to ensure that infrastructure and tooling supported scalability, automation, and efficient development workflows.
- Recruiting and mentoring technical talent, fostering a culture of excellence and growth within the organization.

Petlove

Tech Lead

São Paulo
May 2015 | Jun 2019

- Biggest e-commerce of pet supplies in Brazil.
- Architect and lead the development of the prime membership project which turned to achieve 30% of the monthly revenue and increased the repurchase rate per year by 500%.
- Responsible for understanding and mapping all the company internal processes related to the ERP system. This effort's goal was to upgrade it in order to be able to create multiple WMS, allowing the company to expand their market to other country states. Lead all the technical details involved.
- Technical leadership and management of the Business Intelligence team. Responsible for research and adoption of cutting edge technologies related to big data.
- Lead the definition and creation of an internal supply chain project. Working together with the procurement department in order to automate, manage and optimize the inventory and automate the purchases from suppliers.

Jüssi

Solutions Architect

São Paulo
Nov 2012 | May 2015

- Digital marketing and performance industry, medium sized.
- Work together with Sales and Product teams to turn ideas into software solutions.
- Lead the Facebook Marketing Partner membership, working closely with the Facebook Engineering team to architect and deliver digital marketing solutions to big companies.
- Lead the Google Partner membership, cooperating with Google Engineers to architect and deliver Google Adwords and Google Shopping automation solutions.

Editora Abril

Senior Software Engineer

São Paulo
Sep 2008 | Nov 2012

- Culture and entertainment industry, big sized.
- Development and support internal and external legacy projects, such as a project called Veja SP, an huge catalog and guide for restaurants, nightlife, cinema, etc. And a big internal project for content and assets management through the whole company.

PAST EXPERIENCES

Serasa Experian	Enterprise Architect
Western Union	Senior Software Engineer
Toyota do Brasil	Software Engineer
Wdotnet Internet	Owner
Flyever Electronics	Software Engineer