

Bruno Sebastian Aguirre

Artificial Intelligence | Data Engineering | Data Science | Solution Architecture

Phone: +55 31 972065635

Email: contact@bruno-aguirre.com

LinkedIn: [linkedin.com/in/brunosaguirre](https://www.linkedin.com/in/brunosaguirre)

GitHub: github.com/brunosaguirre

Web: bruno-aguirre.com

Residence: Belo Horizonte, MG, Brazil • Citizenship: Argentina • US Visa: B1/B2

Executive Summary

Senior Executive and Systems Architect with over 20 years of international experience designing, coding, and deploying highly scalable distributed applications, big data pipelines, and agentic AI systems. Proven track record of bridging complex corporate requirements with rapid, hands-on engineering execution—taking concepts through to production-grade enterprise software. Expert in guiding multi-disciplinary cross-border teams across LATAM, US, and Europe.

Key Skills & Expertise

Solution & Systems Architecture Scalable Microservices, Event-Driven, SOA, Distributed Systems	AI & Machine Learning Multi-Agent Orchestration (LangGraph, Pydantic AI, LangChain), GenAI (GPT-4o, Claude, Bedrock, Gemini, SageMaker), RAG, Biometrics.
Data Engineering & Cloud Kafka, NiFi, Airflow, Cloud Migration, Dimensional Modeling, Data Lakes, Snowflake, WhereScape, AWS, GCP, Azure.	Languages & Technical Stack Code: Python, Java, Scala, SQL, C++, Groovy, Bash Shell. Spoken: Spanish (Native), Portuguese (Fluent), English (Fluent), German (Advanced).

Professional Experience

Independent AI Solution Architect & Consultant Belo Horizonte, MG, Brazil	Apr 2024 - Present
Sigga Technologies: Led discovery and design of an autonomous knowledge transfer agent utilizing Azure and GPT-4 to assist junior engineers in streamlining technical onboarding and troubleshooting. Conversational Scheduling Agent: Designed and deployed a message-driven scheduling agent integrated with WhatsApp and GCP Gemini to automate calendar management, reminders, and operational workflow. Self-Healing Diagnostics: Engineered local state-machine diagnostic tools for offline Linux recovery and troubleshooting. <i>Tech Stack: LangGraph, Pydantic AI, LangChain, DeepSeek, GPT-4o, Claude Sonnet, GCP, Azure, Python.</i>	
Accenture — Senior Manager / Solution Architect	Mar 2015 - Apr 2024
Leader of Generative AI Center of Excellence (CoE)	Feb 2023 - Apr 2024
- Founded and scaled an engineering unit of 15 developers and 3 project managers, establishing reusable architecture templates and data governance policies enabling delivery of 50+ GenAI proof-of-concepts across LATAM. - Partnered with enterprise clients in financial services, aviation, and education to launch LLM based applications.	
AI Solution Architect — Bank Brazil	Sep 2023 - Dec 2023
- Product designed high-security biometric authentication platform. - Estimated cost for event-driven orchestrated architecture and regulatory compliance models.	
Big Data Cloud Migration Program Manager — Walmart	Mar 2022 - Feb 2023
- Leader of the 85-person Accenture team composed of data engineers, data architects, and developers across Brazil and Argentina. - Direct coordination of the client's technical team and strategic cooperation with the Google US partner engineering team. - Provided weekly status reports for the program to executive leadership. Key Results: Successful migration and adaptation of 1,500 ETL jobs from 5 global regions with zero downtime. Created an automated validation mechanism and developed +100 custom implementation scripts. Saved 20% in operational cloud expenses. <i>Tech Stack: GCP Dataproc, Airflow, Python, Scala, Java, SQL.</i>	

PROFESSIONAL EXPERIENCE (CONTINUED)

AI Product Development Program Manager — Halliburton

- Client-facing lead with oversight of 4 concurrent software projects for the Oil & Gas industry.
- Directly executed UX design, Data Mapping, Data Modeling, and Workflow design.
- Coordinated cross-functional teams of data engineers, data architects, and data scientists.

Jan 2021 - Mar 2022

Key Results: Delivered predictive delivery systems and process mining solutions, optimizing supply chain efficiency and reducing inventory out-of-stock anomalies.

Tech Stack: GCP, Celonis, Sisense, Proprietary Workflow Manager.

Big Data Platform Modernization Manager — British American Tobacco (BAT)

- Architecture modernization strategy extracting 14TB+ of enterprise data into Hub-Spoke BI reporting models.
- Direct coordination of technical teams comprising data engineers, data architects, data modelers, and BI engineers.

Mar 2019 - Apr 2020

Tech Stack: WhereScape, Snowflake, GCP, Bash Shell, SQL.

GAPSO Computer Services — IT Manager & Systems Architect

Belo Horizonte, MG, Brazil

- Managed an engineering department of 25 software professionals and led institutional process improvements (CMMI Level 3, MPS.br).
- Architected enterprise Java EE 3-tier platforms, Service-Oriented Architectures (SOA), and RESTful analytical microservices.
- Automated continuous delivery pipelines, testing frameworks, and enforced standardized architectural patterns across teams.

Mar 2006 - Mar 2015

Key Result: Reduced supply chain out-of-stock anomalies by 60% and gained 35% logistical efficiency at YPF Argentina.

EARLY ENGINEERING ROLES

- Olympya Information Technology (2004–2006):** Systems Developer architecting client-server Java platforms.
- DaimlerChrysler AG, Germany (2002):** Research Engineer specializing in Real-Time Control Systems.
- Globosat Brazil Project:** Delivered real-time sentiment analysis streaming platform processing social data live with sub-60 second latency.

EDUCATION & CERTIFICATIONS

Education	Certifications & Training
PhD Candidate in Real-Time Control Systems Universität Ulm, Germany (2004)	- AWS Certified Cloud Practitioner - AWS Partner Accreditation & AWS GenAI Trainer
B.S. in Information Systems Engineering Universidad Tecnológica Nacional, Argentina (2002)	- Management Coaching & Team Development (S&M Brazil) - Advanced AI & Big Data Architecture Credentials

KEY IMPACT & QUANTIFIED RESULTS

60% Out-of-Stock Reduction in supply chain anomalies at YPF Argentina.	1,500 ETL Jobs Migrated for Walmart across 5 global regions with zero downtime.	< 60s Latency Real-time social streaming sentiment processing at Globosat.	20% Cost Savings Direct reduction in annual cloud operating expenses.
--	---	---	---