

ANDRE LUIZ SILVA

Chief Technology Officer | Quantitative Architect | Financial Technology Executive
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EXECUTIVE SUMMARY

Technology Executive & Co-Founder with 15+ years of experience bridging the gap between **High-Frequency Trading (HFT)** systems and **modern Fintech scale**. Proven track record of building and scaling financial platforms from zero to **R\$ 500 million+** in transaction volume. Expert in **Payment Orchestration**, **Embedded Finance**, and **AI-Accelerated Development** (“Agent Engineering”).

Combines deep capital markets knowledge (FIX Protocol, Derivatives, Risk Management) with hands-on technical leadership (Rust, Python, Cloud Native). Successfully raised **\$44M USD** in venture capital (Series A/B) and led international expansion into Mexico.

PROFESSIONAL EXPERIENCE

a55 Payments | São Paulo, Brazil

Chief Technology Officer | *January 2024 – Present*

Leading the strategic pivot to a robust Payment Orchestration Platform.

- **Strategic Pivot:** Led the transformation of the company’s core infrastructure from lending to payments, successfully launching a standalone **Payment Orchestration Platform** capable of aggregating multiple acquirers and optimizing transaction fees.

- **AI-Accelerated Development:** Pioneered an “**Agent Engineering**” methodology, orchestrating swarms of AI agents to handle code generation, automated auditing, and system optimization. This approach maintained the velocity of a 50-person team with a fraction of the headcount, achieving a **70% reduction in time-to-market**.
 - **Technical Architecture:** Architected a high-throughput payment gateway handling complex split-payments for marketplaces and ensuring enterprise-grade reliability and security.
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a55 Credit | São Paulo, Brazil & Mexico City

Co-Founder & Chief Technology Officer | *January 2019 – December 2023*

Leading Latin American fintech in alternative lending for the digital economy.

- **Scale & Growth:** Co-founded and scaled the technology organization from 3 to **110+ engineers**, facilitating over **R\$ 500 million** in credit to **20,000+ companies**.
 - **Fundraising:** Key technical lead in securing **\$44M USD** (Series A & B) from top-tier investors including Santander InnoVentures and Movic.
 - **International Expansion:** Successfully launched operations in **Mexico**, adapting credit models and regulatory compliance systems for cross-border lending.
 - **DeFi Integration:** Architected Latin America’s first **crypto-backed debt financing operation**, tokenizing credit assets to tap into global DeFi liquidity pools.
 - **Risk Management:** Maintained loan default rates below **2%** through proprietary AI-driven credit scoring models analyzing real-time revenue data.
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Captalys | São Paulo, Brazil

Chief Technology Officer | *March 2016 – December 2018*

Pioneer in private credit investment and embedded finance in Brazil.

- **Embedded Finance:** Architected the first “Lending-as-a-Service” API ecosystem in Brazil, allowing ERPs and marketplaces to offer seamless credit products.

- **Credit Engine:** Built a comprehensive **FIDC Management System** automating Net Asset Value (NAV) calculation, session assignments, and amortization schedules for complex credit portfolios.
 - **Fraud Prevention:** Developed a high-throughput receivables anticipation engine integrated with the **Central Bank of Brazil**, preventing double-dipping and fraud in collateralized lending.
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Infinity Asset Management | São Paulo, Brazil

Partner & Consultant | 2015 – 2016

- **Derivatives Trading:** Developed specialized execution systems for **DI Futures (Depósito Interfinanceiro)** spreads, calculating real-time **DV01** sensitivity for interest rate risk management.
 - **Real-Time NAV:** Built pricing engines for multi-asset funds, providing intraday P&L visibility for portfolio managers.
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Infestus Capital | São Paulo, Brazil

Proprietary Trader | September 2013 – June 2015

Quantitative proprietary trading firm focusing on HFT and statistical arbitrage.

- **High-Frequency Trading:** Managed colocated “Blackbox” servers at B3 exchange, optimizing C++ and Prolog code for microsecond-level execution.
 - **Arbitrage Strategies:** Executed **Odd Lot Arbitrage**, **Penny Jumping**, and **Dollar/Index Roll** strategies.
 - **Fractal Analysis:** Developed fractal-based trend detection tools to identify early market movements across multiple timeframes.
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DLM Invista (Interasset) | São Paulo & Belo Horizonte, Brazil

Systems Developer | 2011 – 2013

- **Options Arbitrage:** Built execution algorithms for **Box Spread** strategies (4-point arbitrage) to capture risk-free rates in the options market.

- **Hedge Fund Systems:** Developed internal Order Management Systems (OMS) and risk monitors using .NET, supporting a fund with a Sharpe Ratio of 1.8.
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Banco Fator / Fator Securities | Rio de Janeiro & São Paulo, Brazil

Quantitative Developer & Electronic Trading Specialist | 2009 – 2011

- **Market Impact:** Modernized the electronic trading desk, elevating the bank from **12th to 4th place** in BMF futures volume rankings.
 - **Algorithmic Trading:** Pioneered **Complex Event Processing (CEP)** for **Cash & Carry** and **Mean Reversion** strategies.
 - **Cross-Border Arbitrage:** Built **ADR Arbitrage** systems for the New York branch, exploiting price discrepancies between B3 and NYSE.
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Link Investimentos (Acquired by UBS) | São Paulo, Brazil

Electronic Trading Specialist | 2008 – 2009

- **FIX Protocol:** Served as the subject matter expert for FIX connectivity and Direct Market Access (DMA) at Brazil's largest investment bank by volume.
 - **Trading Infrastructure:** Supported high-volume electronic trading desks and optimized order routing systems.
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TECHNICAL ARSENAL

- **Languages:** Rust, Python, TypeScript/Node.js, C++, C#, Java, Prolog.
 - **Financial Protocols:** FIX Protocol (4.2/4.4/5.0), FAST, ITCH/OUCH, ISO 8583.
 - **Cloud & DevOps:** AWS (Advanced), Kubernetes, Docker, Terraform (IaC).
 - **Data & AI:** PostgreSQL, MongoDB, Time-Series DBs, LLM Integration, Agentic Workflows.
 - **Blockchain:** Smart Contracts (Solidity), DeFi Protocols, Tokenization.
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EDUCATION & LANGUAGES

- **Languages:** Portuguese (Native), English (Fluent).
- **Education:** Continuous self-directed learning in Quantitative Finance, Distributed Systems, and Artificial Intelligence.