

# André Luiz Silva

Chief Technology Officer · Quantitative Architect · Fintech Executive

## CONTACT

### Location

São Paulo, Brazil

### Email

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### LinkedIn

[linkedin.com/in/bahuan](https://linkedin.com/in/bahuan)

### Portfolio

[bahuan.dev](https://bahuan.dev)

♦ Remote & International Available

## CORE COMPETENCIES

- › Payment Orchestration
- › High-Frequency Trading
- › Embedded Finance
- › AI Agent Engineering
- › Credit Risk & Scoring
- › DeFi & Tokenization
- › Regulatory Compliance
- › Team Scaling (3 → 110+)
- › Fundraising (\$44M)
- › International Expansion

## LANGUAGES

- › Portuguese — Native
- › English — Fluent

## EDUCATION

Executive-level self-directed program in Quantitative Finance, Distributed Systems & Artificial Intelligence. Continuous learning practitioner with 17+ years of applied R&D.

R\$500M+

PROCESSED

\$44M

RAISED (A+B)

110+

ENGINEERS LED

17+

YEARS IN FINANCE

CTO & Co-Founder who bridges High-Frequency Trading systems with modern Fintech at scale. Built and scaled financial platforms processing R\$500M+ in transactions, raised \$44M in venture capital, and pioneered AI-accelerated development ("Agent Engineering") to deliver enterprise-grade payment and credit infrastructure across Latin America.

## PROFESSIONAL EXPERIENCE

### Chief Technology Officer

Jan 2024 – Present

a55 Payments · São Paulo, Brazil

- ▶ Led strategic pivot from lending to payments, launching a **Payment Orchestration Platform** aggregating multiple acquirers with optimized transaction routing
- ▶ Pioneered **Agent Engineering** methodology — AI agent swarms for code generation and automated auditing — achieving **70% reduction in time-to-market** with a fraction of the headcount
- ▶ Architected high-throughput gateway handling complex **split-payments for marketplaces** with enterprise-grade PCI-DSS Level 1 compliance
- ▶ Built full-stack payment infrastructure: **75 DB migrations across 28 DDD domains**, double-entry ledger, webhook deduplication, multi-provider fallback

### Co-Founder & Chief Technology Officer

Jan 2019 – Dec 2023

a55 Credit · São Paulo & Mexico City

- ▶ Co-founded and scaled technology org from **3 to 110+ engineers**, facilitating **R\$500M+ in credit** to 20,000+ companies across Brazil and Mexico
- ▶ Key technical lead in securing **\$44M USD** (Series A & B) from Santander InnoVentures, Movile, and top-tier VCs
- ▶ Launched **LatAm's first DeFi-integrated debt operation**, tokenizing credit assets to tap global liquidity pools via Centrifuge Protocol
- ▶ Maintained loan default rates **below 2%** through proprietary AI-driven credit scoring analyzing real-time revenue data

### Chief Technology Officer

Mar 2016 – Dec 2018

Captalys · São Paulo, Brazil

- ▶ Architected Brazil's first "**Lending-as-a-Service**" API ecosystem, enabling ERPs and marketplaces to offer embedded credit products — pioneering Embedded Finance in Brazil
- ▶ Built FIDC Management System automating NAV calculation, session assignments, and amortization for complex credit portfolios integrated with the **Central Bank of Brazil**

## TECHNICAL ARSENAL

- › Rust · Python · TypeScript
- › C++ · Go · Java · Solidity
- › FIX Protocol (4.2/4.4/5.0)
- › ISO 8583 · FAST · ITCH

## CLOUD & INFRASTRUCTURE

- › AWS (ECS/Lambda/Cognito)
- › Kubernetes · Docker
- › Terraform · IaC
- › PostgreSQL · Redis
- › TimescaleDB · Kafka
- › CI/CD · Sentry · Datadog

## AI & DATA

- › LLM Orchestration
- › Multi-Persona AI Agents
- › ML Credit Scoring
- › SHAP Explainability
- › Agentic / Vibe Coding

## FINANCIAL PROTOCOLS

- › PIX / Boleto / Cards
- › B3 DMA Gateway
- › BACEN / CVM APIs
- › Circle API / USDC
- › NFS-e / NF-e (SERPRO)

## BLOCKCHAIN

- › Solidity Smart Contracts
- › DeFi Protocols
- › Asset Tokenization
- › USDC Remittances

## EARLIER CAREER

### Partner & Consultant

2015 – 2016

Infinity Asset Management · São Paulo

- › Developed execution systems for **DI Futures spreads** with real-time DV01 sensitivity analysis for interest rate risk management
- › Built multi-asset pricing engines providing intraday P&L visibility for portfolio managers

### Proprietary Trader

Sep 2013 – Jun 2015

Infestus Capital · São Paulo

- › Managed colocated HFT servers at **B3 exchange** (Equinix SP4), optimizing C++ and Prolog code for **microsecond-level execution**
- › Executed Odd Lot Arbitrage, Penny Jumping, Box Spread, and ADR Arbitrage strategies with FPGA feed handlers and kernel-bypass networking

### Quant Developer

2011 – 2013

DLM Invista (Interasset) · São Paulo & Belo Horizonte

- › Built execution algorithms for **Box Spread strategies** (4-point options arbitrage) capturing risk-free rates
- › Developed internal OMS and risk monitors using .NET for a fund achieving **Sharpe Ratio of 1.8**

### Quant Developer & Electronic Trading Specialist

2009 – 2011

Banco Fator / Fator Securities · Rio de Janeiro & São Paulo

- › Modernized electronic trading desk, elevating the bank from **12th to 4th in BMF futures volume** rankings
- › Pioneered CEP-based algorithmic trading for Cash & Carry and Mean Reversion; built ADR Arbitrage systems for the NYSE branch

### Electronic Trading Specialist

2008 – 2009

Link Investimentos · São Paulo (Acquired by UBS)

- › FIX Protocol subject matter expert for Direct Market Access (DMA) at Brazil's largest investment bank by volume
- › Supported high-volume electronic trading desks and optimized institutional order routing systems

## KEY PROJECTS & ACHIEVEMENTS

### PAYMENTS

Full-stack gateway with multi-provider fallback, double-entry ledger, 28 DDD domains. WhatsApp account opening with KYC/biometric verification.

### AI / ML

ML-powered credit risk engine with SHAP explainability. Conversational AI agent platform with real-time compliance detection (95% test coverage).

### ENTERPRISE

Multi-tenant ERP with NFS-e/NF-e fiscal engine (SERPRO mTLS). Digital signature infrastructure with A1/A3 certificate management.

### DATA & BLOCKCHAIN

ETL pipeline with 24 public data connectors (SELIC, IPCA, judicial). USDC remittance service with blockchain wallet creation.

## LEADERSHIP PHILOSOPHY

Hands-on CTO who reviews PRs, pair-programs, and debugs production at 3 AM. Core team together for **10+ years across 3 consecutive ventures** (Capitals → a55 Credit → a55 Payments). Scaled from 3 to 110+ professionals across Brazil and Mexico while maintaining 100% technical involvement. Pioneer of Agent Engineering — leveraging AI to multiply team output without sacrificing quality.