Claudio **Vilas Boas**

Senior Software Engineer · Blockchain & Emerging Technologies

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Dual citizen: Brazilian Italian

"Simple can be harder than complex: You have to work hard to get your thinking clean to make it simple."

Summary

Innovative software engineer and technical leader with over six years of experience in blockchain, fintech, and distributed systems. Passionate about transforming complex challenges into simple, scalable solutions, I excel in driving technological innovation across startups and established enterprises

Skills

TechSkills	Smart Contracts, Blockchain, Distributed Systems, CI/CD, Cryptography, Systems Architecture, Algorithms, Data Structures, Machine Learning, MicroServices
DevOps	Docker, Kubernetes, Terraform, AWS, Google Cloud, GitHub Actions, Prometheus, Grafana
Back-end	Node.js, Express, NestJS, PostgreSQL, MongoDB, Redis, RabbitMQ, WebSockets, Gin, Axum, Hardhat, Foundry
Front-end	React, React Native, Next.js, Tailwind CSS, Web3.js, Ethers.js
AI	PyTorch, TensorFlow, Scikit-Learn (limited exposure), Reinforcement Learning (exploratory), ElisaOS (AI-Agent framework)
Programming	Go, Solidity, Rust, Python, JavaScript, TypeScript, C++, C, C#, LaTeX
Languages	English (Fluent), Portuguese (Fluent), Italian (Limited Working Proficiency)
SoftSkills	Technical Leadership, Team Management, Strategic Thinking, Problem-Solving, Cross-Functional Collaboration, Decision-Making, Mentorship, Communication

Work Experience

Uno Re

January 2024 – Present

Lead Engineer — *Dubai, UAE*

- Appointed as **Lead Engineer** following Syslabs' acquisition of a majority stake in Uno Re, **overseeing the restructuring of Uno Re backend (Node.js)** during the transition to Lunos, which is a complete rebranding of the project post acquisition
- Directing the **redeployment of Uno Re V3**, smart contracts optimizing the protocol in many different segments
- Pioneered an AVS automated claims system implementing **AI agent-based workflows** and tested **inference** for claims,leveraging a **P2P network architecture** optimized for distributed, real-time applications

Pollum

January 2021 – 2024

Co-Founder & CTO — *Florianopolis, Brazil*

- Orchestrated development of Pali Wallet, scaling to **20,000+ downloads**, the code is all open-source and can be seen at my github or through my personal website
- Designed and optimized **blockchain infrastructure**, focusing on **smart contracts**, RPC nodes orchestration, systems design and architecture
- Led 40+ engineers across multiple blockchain projects for Syscoin, Solana, Near and other startups with high-quality execution. Always a hands-on leader working together on the product
- **Impact:** Strengthened Pollum's reputation as a **leading blockchain solutions provider** before transitioning into an advisory role

Luxy

September 2021 – March 2023

Blockchain Engineer (Acquired by Syslabs) — *Dubai, UAE*

- Engineered audited smart contracts for an NFT marketplace deployed in production on 4 EVM chains (Syscoin, Polygon, others). Optimized for gas-efficient and scalable transaction processing; open-source code available on GitHub
- Built a backend using **Node.js**, **MongoDB**, and **RabbitMQ** across two **microservices**, indexing millions of ERC721 and ERC1155 NFTs from Ethereum into a **multi-gigabyte database** with high-performance processing
- **Impact:** Facilitated Luxy's **acquisition** by Syslabs, securing its integration into a broader blockchain ecosystem

BTG Pactual

Sao Paulo, Brazil

Software Engineer

Jul. 2020 - Jan. 2021

- Optimized High-Frequency Trading: Enhanced **Dolarbot**, an automated USD/BRL futures trading bot, significantly improving execution speed and strategy efficiency. Upgrades, mostly algorithmic optimizations, led to winning high-value auctions, generating millions in profits by outperforming competing systems
- **Built a Private Liquidity Market:** Developed **BLOX**, a privacy-focused large-order execution system for institutional investors
  - Designed the order-matching system, ensuring high integrity and low-latency execution
  - Integrated with BTG's Order Management System (OMS) for seamless trade execution
  - Developed a graphical admin interface for system oversight and management
- **Impact:** Improved **BTG's institutional trading efficiency**, securing **high-value market opportunities** and enhancing liquidity execution

Advisory & Consulting Roles

Pollum

2024 – Present

Technical Advisor

Florianopolis, Brazil

- Provide high-level technical consulting on blockchain and AI solutions
- Advise on Pali Wallet's roadmap and new projects architecture

Education

Federal University of Santa Catarina (UFSC)

Mar. 2014 - Apr. 2022

B.S. in Electronics Engineering

Florianopolis, Brazil

- **Relevant Coursework:** Machine Learning, Data Structures (C++), Signal Processing, Embedded System Security, and Image Processing
- **End-of-Course Project:** Developed a protocol for decentralized token marketplaces using blockchain technology

Extracurricular Activity

Quan Digital

2019 – 2021

Quan Digital & Pryno (Entrepreneurial Project)

Florianopolis, Brazil

- Founded Quan Digital to pioneer automated trading strategies and serve as a research hub for technical analysis in the cryptocurrency market
- Developed **Pryno**, an open-source trading bot for Bitmex featuring comprehensive **back-testing**, integrated REST and **WebSocket APIs**, and tailored **AWS EC2** deployment

LINSE University Research Lab

2015 – 2019

Research Experience

Florianopolis, Brazil

- Immersed in advanced **signal processing** techniques and extensive academic literature, laying the foundation for a career in technology and research
- Contributed to the **G718 Codec Implementation** by translating CODEC G718 from C to Assembly for the BF533 DSP (Blackfin, Analog Devices), showcasing low-level programming expertise.
- Developed a **Digital Pedalboard** project by first implementing audio effects on an **Arduino** platform, then porting the solution to an **Android app**. Developed in C++, the app processes real-time guitar input via the phone's P2 jack and outputs effects (equalizer, chorus, reverb, fuzz) through a Bluetooth sound system, demonstrating robust embedded systems and signal processing expertise
- Developed **SparkingLot**, a comprehensive parking management solution featuring:
  - A **React Native** app for iOS and Android enabling parking spot reservations
  - A supervised learning network using **SVM** to classify parking spot availability from camera images
  - A REST API server for efficient data acquisition and app communication

Brazil Unified Health System (SUS)

2019

Hackathon SUS (3rd Place)

Florianopolis, Brazil

- Developed a **Telegram chatbot** and trained a **neural network** on SUS patient data to predict no-shows

Intel

2016

Intel Embedded Systems Competition

Joao Pessoa - Brazil

- Co-created Project **MICE**, advancing it to finalist status in a competitive event and earning multiple Intel embedded systems prizes that were subsequently donated to **UFSC**
- Built an intelligent energy meter using **Arduino** and a **CNN** on Galileo Gen2, **achieving 98% accuracy in real-time** residential power consumption analysis

University Project

2018

Financial Stock Prediction (Final ML Project)

Florianopolis, Brazil

- Developed a **TensorFlow**-based hybrid model for **S&P500** forecasting using PSO-optimized **LS-SVM** and technical indicators. This research-inspired approach offers a robust alternative to CNNs

University Project

2018

Music-Sheet Reader (Final Image Processing Project)

Florianopolis, Brazil

- Built an algorithm to **detect musical notes** from a sheet and convert them into **MIDI format**