

Lucas Almeida Costa

Software Engineer · Front-end Specialist

Salvador, BA, Brazil · lucasdevba@gmail.com · linkedin.com/in/lucasalmeidacosta · github.com/LucasDEVBA · lucas-costa-portfolio.vercel.app

Professional summary

Software Engineer with 6+ years of experience, front-end specialist (Angular, Vue.js, React, TypeScript) and full-stack (Node.js, PostgreSQL). At Exadel Financial Services, led 5 concurrent projects per quarter for BTG Pactual, delivered 12–15 new ones, eliminated production freezes with ~70% faster applications and cut application build-out time by up to 80% with AI. At i4Pro, led the migration from Vue 2 to Vue 3 with Vite and improved the performance of the insurance ERP used by Itaú, Santander and Bradesco by up to 45%.

Professional experience

Software Engineer (Front-end Specialist)

Exadel · Client: BTG Pactual

07/2025 – present · Exadel Financial Services unit. Internal portals for BTG Pactual's offshore investment areas

- Led 5 concurrent front-end projects per quarter and delivered 12–15 new ones to date, plus Angular version migrations and performance fixes, owning each end to end: specification, prototyping, integration, deployment and production observability.
- Built Angular features (standalone components, TypeScript, RxJS and NgRx) for the portals, used 24/7 by hundreds of users and processing tens of thousands of records, and helped implement the bank's internal standardized styling tool, built on Tailwind CSS.
- Migrated legacy applications from Angular 14 and 16 to Angular 20 (up to 6 major versions), with 30–40% faster builds, 20–30% smaller bundles and 20–30% better load times, adopting Signals, built-in control flow, @defer and the esbuild builder.
- Eliminated production freezes and made the accounting applications that received 9,000+ records in a single request about 70% faster, by implementing chunked (batch) processing of the calls.
- Integrated the Angular front-end with Java services and the Calypso platform (trading, risk and post-trade).
- Cut front-end application build-out time by 75–80% with generative AI, MCP (Model Context Protocol) servers for internal libraries and automated feature tests (Jest and Jasmine), while keeping the project's architectural standards.

Technologies: Angular 20, Signals, TypeScript, RxJS, NgRx, Tailwind CSS, Jest, Jasmine, REST APIs, GenAI, MCP

Front-end Developer

i4Pro

07/2024 – 07/2025 · Insurance ERP used by major players such as Itaú, Santander, Bradesco, Berkley, Prudential and Porto

- Led the migration of the ERP's front-end from Vue 2 to Vue 3 with Vite, improving application and integration performance by 40–45%.
- Built Vue.js features with Vuetify and Vuex for the ERP used by major players such as Itaú, Santander and Bradesco, in a BFF (Backend for Frontend) architecture consuming RESTful .NET (C#) APIs backed by SQL Server stored procedures.
- Built a per-instance permission tree fed by the .NET APIs that listed thousands of permissions, validating the instances and rendering it all with virtual scrolling, lazy-loaded nodes and batch processing, without freezing the browser.
- Implemented clipboard copy of scripts of up to 100,000 characters without freezing the UI.
- Co-led strategic product and technology decisions for the major insurers and banks served.

Technologies: Vue.js, Vuetify, Vuex, Vite, JavaScript, REST APIs, BFF

Full-stack Software Engineer

Independent projects

2026 – present · Custom products and systems for sports education, healthcare and public sector clients

- Architected and built Easy Control as the sole engineer, AI-assisted (Claude Code): the operations platform of Bolsa Atleta USA (CRM, pipeline, finance, AI and WhatsApp), with 27 Cloud Functions and 410+ merged pull requests (100+ production releases) in 2026.
- Automated lead qualification with generative AI (Gemini): an auditable 0–100 score, 5 classifications and an adversarial second pass on 100% of mid-range cases.
- Implemented safeguards so that 100% of first WhatsApp contacts require human approval and 0 automated messages reach out-of-profile leads, with 41 CI test suites, including guards that block the merge if an eligibility filter disappears.
- Created operational observability: 23 automated checks every 30 minutes and a dead-man's switch, after silent failures of the WhatsApp provider.
- Designed Artícula and Pulso, clinic management systems with CRM, from design system to clickable prototypes (52 and 40+ screens; 5 and 6 access profiles).
- Built Cripto Terminal (23 documented risk metrics, 237 tests) and RAR-AI, a field form that keeps 100% of the data on the device and offers voice notes on 100% of long-text fields.

Technologies: Next.js, React, TypeScript, Node.js, PostgreSQL, Supabase, Google Cloud, Gemini

Front-end Lead

Avansys Tecnologia · Client: State University of Bahia

01/2024 – 07/2024 · The university's admissions and selection portal (27+ campuses; 09/2022 – 03/2023) and internal applications

Previous role: Front-end Developer · 05/2022 – 07/2024

- Unified admissions and selection applications for 100% of the university's campuses (27+) into a single system, with Vue.js and Nuxt on the front-end and NestJS on the back-end, co-leading the front-end and integrations as one of the technical leads.
- Built applications and took part in migrating the legacy Grails base template to a new Vue.js and Nuxt template, upgrading both frameworks; with a Storybook component library, the new template cut development time for new internal applications by 65% and became the base for all internal projects of pro-rectorates, secretariats and training programs.
- Built the Keycloak authentication flow screens with FTL (Apache FreeMarker Template Language) templates.

Technologies: Vue.js, Nuxt, NestJS, TypeScript, Storybook, FreeMarker (FTL)

Technical Lead and Full-stack Developer

Ártio Escola de Negócios Potentes
09/2022 – 04/2023 · Business school. Internal employee management system and product sales websites
Previous role: Full-stack Developer (contract) · 08/2022 – 09/2022

- Led a 4-person technology team (1 UI/UX product designer and 3 developers), introducing agile practices to organize workflow and delivery.
- Architected an internal employee management system in Next.js and Node.js from the ground up, defining infrastructure, database, stack and hosting.
- Worked across 100% of the development stages, from UI design to deployment, contributing hands-on in every area of the team.
- Led front-end development of new product sales websites, ensuring responsive design and scalability.
- Managed cloud infrastructure on DigitalOcean, handling deployment and system integrations.

Technologies: Next.js, Node.js, WordPress, DigitalOcean, Agile

Junior Web Developer

Littus Sistemas Integrados
03/2021 – 02/2022 · Client systems, with Python and Django updates and Linux deployments
Previous role: Web Development Intern · 02/2020 – 02/2021

- Developed system update features in Python and Django.
- Worked directly with clients to align system improvements and supported application deployments on Linux (openSUSE).
- Researched JavaScript stacks for building a new web product.

Technologies: Python, Django, JavaScript, Linux (openSUSE)

Technical skills

Front-end: TypeScript, JavaScript (ES2023+), Angular, RxJS, Vue.js, Vuetify, Nuxt, React, Next.js, HTML5, CSS3, Tailwind CSS, GSAP
Back-end and integrations: Node.js, Python (FastAPI), C# / .NET in the Apólice project, NestJS, REST APIs, BFF (Backend for Frontend), Java and Calypso integration, Keycloak integration (authentication), FreeMarker (FTL), Webhooks
Data: PostgreSQL, SQL, Supabase, Row Level Security
Cloud and DevOps: Docker, AWS, Terraform (IaC), Messaging (RabbitMQ, Amazon SQS), Google Cloud (Cloud Functions), Vercel, CI/CD with GitHub Actions, Git, Monorepo (Turborepo)
Quality and testing: Jest, Vitest, Testing Library, xUnit, Integration testing (Testcontainers), Playwright (E2E), Code review
Applied AI: Generative AI (Gemini, LLMs), LLM evaluation, Prompt engineering, AI automation, AI classification
Design and UX: Design systems, UX/UI, Figma, Prototyping, Accessibility (WCAG, WAI-ARIA)
Architecture: Clean Architecture, DDD, CQRS-lite, Component architecture, Web performance (Core Web Vitals), Financial markets, Insurance

Selected projects

Apólice — Insurance · .NET · React · Live site: apolice.vercel.app · github.com/LucasDEVBA/apolice. Technologies: C#, .NET 10, ASP.NET Core, EF Core, React.
Easy Control — CRM · Full-stack web platform · AI automation · Live site: bolsaatletausa.com. Technologies: Next.js, React, TypeScript, Node.js, PostgreSQL (Supabase).
Prumo — LLMOps · github.com/LucasDEVBA/prumo. Technologies: Python, FastAPI, Amazon Bedrock, AWS Lambda, AWS CDK.
Pulso — Clinic management (CRM) · Landing page · Design system · Live site: integratj.com.br. Technologies: React 19, Next.js 16, TypeScript, Tailwind CSS 4, Vite.
Cripto Terminal — Financial data analytics · PWA · Data visualization. Technologies: Next.js 16, React 19, TypeScript, Tailwind CSS 4, TanStack Query.
RAR-AI — Mobile-first web app · Field data collection. Technologies: Next.js 16, React 19, TypeScript, Tailwind CSS 4, Zustand.

Education

Undergraduate degree in Artificial Intelligence (in progress) — FIAP (02/2026 – 08/2028). Focus on Machine Learning, Generative AI and Natural Language Processing (NLP).
Bachelor's degree in Software Engineering — Centro Universitário Internacional UNINTER (2022 – 2026). Software architecture, software design and agile methodologies.
Technical High School Program in Information Technology — CEEP Newton Sucupira (2018 – 2022). Technical foundation in programming with JavaScript and Java.

Courses & certifications

Foundational C# with Microsoft (certification) · freeCodeCamp	AWS Cloud Practitioner prep course · DIO
CS50's Introduction to Computer Science (CS50x) · Harvard University (online, 2024–2025)	UX Designer program · DIO
CS50's Introduction to Programming with Python (CS50P) · Harvard University (online, 2026–present)	Resilient Architectures on Google Cloud · DIO
English (U-Best) and DevOps Engineer course · UNINTER	Microservices with Node.js · DIO
	Spring Boot · DIO
	Testing with Jest and TDD · DIO

Awards

1st place in Innovation and Technology and 3rd place in Usability — 29th Brazilian Congress of Anatomy, Brazilian Society of Anatomy (2022). Awards won by the State University of Bahia Human Anatomy Atlas website, which I built.

Languages

Portuguese — native · English — professional working proficiency