Marcel Scognamiglio Senra Lourenço

Senior Software Engineer | System Architect | AI & Automation Specialist

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Professional Summary

System Architect and Software Engineer with 5+ years of experience helping companies deliver impactful digital products through automation, AI, and scalable architecture — across industries such as **education**, **food safety**, **retail**, **and online sales**. I build systems to make people's lives easier, because I believe technology, when used well, can improve how we live and work.

I started my career in **front-end engineering**, which shaped my product mindset and deep respect for the user experience. Later, I transitioned into fullstack and architectural roles, designing platforms end-to-end — from backend orchestration to polished UX using modern frameworks and clean design principles.

I've worked in both global and niche markets, delivering systems that served **tens of thousands** — **and in some e-commerce cases, hundreds of thousands** — **of users in production**. Most recently, I led **AI-Driven development inside small, cross-functional squads** (1 to 5 members) focused on building secure, clean, human-integrated code alongside AI agents.

I naturally take on the role of an integrator — the one who explores, writes, diagrams, and helps the team navigate complexity with confidence. With a background in journalism, I bring clarity through communication, documentation, and a strong sense of direction that helps teams align and move forward together.

I'm also in constant pursuit of better tools, ideas, and patterns — a personal drive to learn, test and evolve that keeps my work sharp and forward-thinking.

Professional Experience

FoodReady - Senior Software Developer / Automation & AI Engineer

Nov 2024 - Present

- Built AI-powered automation agents for regulatory compliance in food safety SaaS.
- Led workflow orchestration using Orkes/Conductor and real-time notifications with Novu.
- Migrated from cron-based systems to event-driven architecture using AWS Lambda, EventBridge, and PostgreSQL.
- **Led database migration from MongoDB to PostgreSQL**, improving performance and consistency across large-scale data.
- Replaced third-party auth service with a secure, proprietary solution, integrated across applications.
- Collaborated closely with product, engineering, and compliance teams to deliver scalable, regulatory-aligned solutions.

Synthetic Systems - DevLead (Consultant)

Jan 2023 - Oct 2023

- Technical lead for full-stack monorepo platform (Next.js, GraphQL, MongoDB).
- Led backend-to-frontend integration with focus on performance and user experience.
- Facilitated agile ceremonies, technical planning, and architectural decisions.
- Mentored developers and improved team delivery speed significantly.

Quero Educação - Software Developer

May 2022 - Nov 2023

- Developed frontend features for educational marketplace (Vue, Nuxt.js, React, TypeScript).
- Delivered SEO improvements and Core Web Vitals optimization.
- Integrated frontend with backend services (Node.js, Ruby on Rails, PostgreSQL).
- Set up CI/CD pipelines with AWS, Docker, and Kubernetes.

Technical Skills

Languages & Frameworks:

JavaScript (Node.js, React, Next.js, Vue, TypeScript), Python, PHP, GraphQL, Rust (in progress)

Frontend & UX Tools:

Figma, Design Systems, Responsive Design, Markdown, Mermaid Diagrams

Databases:

PostgreSQL, MongoDB, Supabase, Firebase

Cloud & DevOps:

AWS (Lambda, EventBridge, CloudWatch, CodePipeline), Docker, Kubernetes, Vercel, Netlify, CI/CD, GitHub Projects, Jira, Notion, Miro

AI & Automation:

Orkes/Conductor, Novu, n8n, Trigger.dev, OpenAI API, AI-based data enrichment, smart notification systems

Architecture & Product:

Event-driven systems, Microservices, API-first design, AI-embedded agents, UX-focused development, Design Systems, Modular Component Patterns (MCPs), accessibility best practices

Certifications (Selected)

- Front-End Engineer Codecademy (May/2023)

 JavaScript · CSS · Jest · Responsive Web Design · Front-End Development
- **TypeScript** Codecademy (Oct/2023) JavaScript • TypeScript

- **React Native** Codecademy (Nov/2023) *Mobile apps with React*
- **GitHub Copilot** Codecademy (Oct/2023) *AI integration in the development workflow*
- Official ChatGPT Course Codecademy (May/2023) Foundations of AI for product and automation
- MTA: Software Development Fundamentals FIAP (Jul/2023) HTML5 · CSS · React.js · Web Application Architecture
- **Mobile Development** FIAP (Jul/2023) Front-end development • Web and Mobile Apps
- **Vue.js 3** Codecademy (Mar/2022) *Modern framework for SPAs*
- **Software Design Principles** Codecademy (Apr/2022) *Best practices in software design and architecture*

Education

- Systems Technology (Associate Degree) FIAP (2021-2023)
- BA in Journalism, Philosophy & Technology FAPCOM (2009–2013)

Languages

- Portuguese Native
- English Professional
- Spanish Intermediate