Rodrigo Alvarez

Software Engineer

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About Me

Software Engineer with experience in application development, systems integration, and cloud infrastructure. I work across the full development lifecycle, from technical design and frontend and backend implementation to deployment and production maintenance.

Experience

Software Engineer January 2025 – Present

Foris

- Designed and implemented the platform's centralized authentication and identity system, replacing separate authentication in each service and integrating each institution's identity providers (IdPs). The system currently serves over 10,000 users across 88 tenants in production.
- Implemented asynchronous ETL pipelines for high-volume load and export, reducing manual operational work for engineering teams.
- Automated deployments with GitHub Actions and Helm, and built integrations with legacy PHP systems to keep platform interoperability.

Software Engineer January 2024 – January 2025

Fundación Oftalmológica Los Andes

- Developed a surgery management platform with Next.js and PostgreSQL, replacing legacy software for about 100 internal users.
- Designed and provisioned AWS infrastructure (networking, ECS, RDS) for development and production with Terraform and Terragrunt.
- Built the core service in Go and gRPC, and secured access with Authelia + LDAP and CI/CD pipelines.

Software Engineer November 2021 – January 2024

PortalTerreno

- Designed a serverless ETL pipeline on AWS Lambda for CSV/JSON/XML ingestion and cut processing time from roughly 12 hours to minutes.
- Led the migration from a PHP monolith to a scalable architecture with TypeScript, Next.js, React, Redux, and PostgreSQL.
- Implemented CI/CD (Jest, typing, linters) and migrated IaC from Serverless Framework to AWS CDK.
- Built asynchronous microservices on AWS ECS/SQS for image optimization and transactional email delivery.

Academic Experience

Lecturer of Data Structures and Algorithms February 2024 – February 2025

Diego Portales University

- Taught undergraduate Data Structures and Algorithms, covering complexity analysis and fundamental data structures.

Projects

Product Scanner & Price Aggregator July 2025 – Present

Software Engineer (Personal Project)

- Designed the distributed architecture for product scraping and matching in a 2-engineer team (Cloudflare Workers).
- Built a semantic matching engine with Gemini embeddings and Qdrant to map offers into a single catalog.
- Orchestrated asynchronous pipelines with Queues, Durable Objects, KV, R2, and Turso.

Homearcy (MVP) March 2024 – September 2024

Tech Lead & Backend Engineer

- Led technical development of the MVP, defined the backend architecture, and coordinated a 4-developer frontend team (React Native/Expo).
- Implemented TypeBox + OpenAPI to generate a typed SDK and speed up frontend-backend integration.
- Built core business logic with Fastify and Prisma, including reminders and LLM-based medication recognition from photos.

Schedule generator for university students March 2023 – January 2024

Software Engineer (Personal project)

- Built a web app to generate university schedules without class conflicts.
- Implemented DFS and Backtracking to evaluate combinations in milliseconds; deployed on Vercel and used by 1000+ students.

View code

Education

B.S. in Computer Science and Telecommunications Engineering 2018 – 2023

Diego Portales University

Technical Skills

Languages: TypeScript, Python, Go, PHP
Frontend: React, Next.js, React Native
Backend and Integration: Django, Fastify, OpenAPI, gRPC
Data: PostgreSQL, MySQL, DynamoDB
Infrastructure: AWS, Cloudflare, Terraform, AWS CDK, Docker, Helm, GitHub Actions, CI/CD
AI: Qdrant, LLM integration and embeddings