

Daniel Fidalgo Silva

Backend & platform engineer. I build payment, media and AI infrastructure with Rust, the JVM and GCP.

Cochrane, AB · open to remote

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about

19 years building production systems, from SkipTheDishes' dispatch platform (430k deliveries on a peak Friday) to Montra's backend platform on GCP, built from an empty project. Rust, Java, Kotlin and GCP are my core stack; payments, media pipelines and AI integrations are where I have gone deepest.

experience

Montra · Senior Software Engineer

Dec 2023 – Jul 2026

Backend and platform engineer for an AI-powered video creation and video-ads platform. Owned cloud infrastructure, the media pipeline and backend architecture end to end.

- Built the company's cloud platform from scratch on GCP using Terraform: GKE, Cloud Run, Pub/Sub, CDN and dev, staging and production environments with tagged releases, rollbacks and deploy queues.
- Designed and built a Rust + GStreamer video transcoding platform with GPU acceleration, HLS output, chunked resumable uploads, crash recovery and scale-to-zero autoscaling through a custom Kubernetes controller, replacing third-party cloud transcoding.
- Built an AI media generation gateway unifying 20+ models and providers (Google Veo 3, OpenAI Sora 2, Kling, Flux, Runway, ElevenLabs) behind a single service with per-model billing, content moderation and automatic refunds on failure.
- Built the Stripe billing and credits platform: subscriptions, plan changes, credit packs with rollover and an atomic usage ledger with idempotency keys.
- Built the backend of the Montra API Platform in Rust (Poem, OpenAPI-first, SQLx/Postgres): multi-tenant organizations with member management, organization-scoped authorization on every route, and per-account Stripe billing.
- Implemented centralized authorization with SpiceDB (Google Zanzibar model) as a CDN auth proxy, plus Postgres row-level security across all schemas.
- Built text-to-speech with instant voice cloning (ElevenLabs) and contributed to a Rust/WASM video editor core and its server-side renderer.
- Built Shopify and WooCommerce product import, AI brand-kit extraction with web crawling, and ad campaign creation on Meta, TikTok and Google Ads.

EQ3 · Senior Software Developer

Jun 2023 – Nov 2023

Java 17 and Spring Boot backend for retail e-commerce inventory, built test-first with Testcontainers integration tests.

Axlehire · Principal Software Developer

Feb 2022 – May 2023

Member of the technical council, setting architecture and development practices for the routing domain.

- Built automated shipment allocation for the routing process in Kotlin.
- Proposed the Kotlin and Java service architecture, following SOLID principles and domain-driven design.
- Introduced Jenkins declarative pipelines, improving CI/CD productivity.
- Prototyped moving the vehicle routing solution to GCP serverless.
- Fixed a calculation bug in the routing solution, making it simpler and more accurate.

SkipTheDishes · Senior Team Leader

Jul 2019 – Jan 2022

Led the dispatch logistics team, delivering features on a microservices architecture with a focus on reliability and performance.

- Reduced average placed-to-delivered time from 45 to 29 minutes.
- Scaled the system to 430k deliveries on a peak Friday, running up to 22k courier analyses per minute.
- Migrated the stack from Java 8 to Java 11 and then Java 17.
- Reduced human intervention in courier assignment to under 0.1%.
- Remodelled the delivery domain database, improving data consistency and removing race conditions from concurrent updates.
- Wrote the architecture specifications behind system and feature development.
- Hired for and set up a new team focused on new delivery revenue opportunities.
- Mentored team members through regular one-on-ones and shared goals.

SkipTheDishes · Senior Java Developer

Jun 2018 – Jun 2019

Senior developer on the dispatch logistics team's cloud-based distributed backend.

- Introduced a data service dedicated to the job assignment problem, improving resilience and consistency on the asynchronous messaging architecture.
- Built a scoring library that let delivery cost calculations be customized for 500 markets instead of one fixed rule set.
- Moved from hand-written prepared statements to an ORM, ending database deadlocks.
- Added bike couriers to the job assignment logic.
- Introduced metrics that made system performance and business rules visible.

earlier

Senior Software Engineer, Monumenta Comunicação May 2017 – Apr 2018

.NET, Java and Angular web and mobile apps for financial and travel clients.

IT Specialist, IBM Jan 2014 – Feb 2017

WebSphere Portal advisor for large banks in Brazil and Argentina; led performance and load testing for a portal serving 3 million users at peak.

Software Engineer, Monumenta Comunicação Nov 2010 – Jan 2014

.NET web systems and campaigns for advertising clients, including performance testing.

Software Developer, Poliedro Informatica Oct 2009 – Nov 2010

Java EE systems for the public sector, including an epidemiological vector-management system and a reporting application for Brazil's aviation authority (ANAC).

Software Developer, Armtec Jun 2006 – Oct 2009

Java and OpenCms portals and web systems for advertising and corporate clients.

skills

Languages Rust · Java · Kotlin · TypeScript

Cloud GCP · Kubernetes (GKE) · Cloud Run · Terraform

Data Postgres · Pub/Sub · SpiceDB

Domains Payments and billing · Media pipelines · AI model integrations