

Rossmel Abasto

Frontend | Fullstack Developer

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PROFESSIONAL SUMMARY

Frontend Developer with 3+ years of experience at WANT Digital Agency building multi-tenant SaaS, mobile apps and websites with React, Next.js, React Native and TypeScript (~1,800 commits across client products in Bolivia and the US). Solid programming foundation: self-taught since 2020, with years of writing production code without AI assistants. Growing into Fullstack with FastAPI, Node.js, SQLite/PostgreSQL, Firebase and Supabase. Since 2025 I integrate AI into products (hybrid RAG, local and cloud LLMs) and into my daily workflow, to ship faster without sacrificing quality.

TECHNICAL SKILLS

Frontend & Mobile: React, Next.js (Pages & App Router), React Native, Expo, TypeScript, JavaScript, HTML5, CSS3 / Sass, Tailwind CSS, MUI, shadcn/ui, Redux Toolkit, i18n, PWA, Astro, GSAP, Motion

Backend & Data: Node.js, Express, Python, FastAPI, REST APIs, SSE, NextAuth, SQLite (FTS5, WAL), PostgreSQL, Prisma, Drizzle, Supabase, Firebase, Electron

Applied AI: RAG, Hybrid search (BM25 + embeddings), LLM evaluation, Ollama, Groq, Gemini, OpenAI API, DeepSeek, sqlite-vec, GitHub Copilot, Claude Code, AI agents

DevOps, Quality & Tools: Git, GitHub Actions, GitLab, Docker, Linux (Arch), systemd, Cloudflare Tunnel, Tailscale, KVM / libvirt, pytest, Vitest, Vercel, Bruno, Figma

WORK EXPERIENCE

Fullstack Developer — Independent

Jan 2026 – Present | Cochabamba, Bolivia | Freelance

- Link'u (paid project): offline-first desktop app for a growing rural community's water billing (Electron, React, SQLite), with AES-256-GCM encrypted backups, auto-updates, 47 tests and cross-platform CI.
- SGPG: thesis project management system for UDABOL, used by the head of the Systems Engineering program (Next.js 16, Firebase), with AI-powered PDF summary and tag extraction (Groq), document versioning and audit trail.

Frontend Developer (Web & Mobile) — WANT Digital Agency / GeekLabs

Aug 2022 – Jan 2026 | Cochabamba, Bolivia | Internship — Contractor — Employee (2025–2026)

- Lead frontend developer of Vulcano (now CarX), GeekLabs' multi-tenant SaaS for auto repair shops, piloted at a real shop (944 of 1,131 commits): work orders, quotes, vehicles, revenue reports, calendar, CSV import, role-based dashboards and ES/EN i18n with Next.js, TypeScript, MUI, Redux Toolkit and NextAuth.
- Wired the frontend to Vulcano's AI module (built by the tech lead) that auto-generates the services of a work order.
- Built React Native/Expo mobile apps: Adsie, an ads network for Florida connecting local businesses, customers and influencers (434 of 497 commits); Vulcano's mechanic app (push notifications, service timer); One Life Fitness (a gym in Cochabamba and La Paz) and OneHand (physiotherapy appointments).
- Built the frontend of Bite, a multi-tenant digital menu and ordering SaaS for restaurants (Next.js App Router): QR table ordering, checkout, coupons, branches, plans and Google Maps.
- Built the WordPress website for LYNX Bolivia, an electronics and home appliance retailer.
- Worked alongside the tech lead (backend) integrating REST APIs, with code reviews and short delivery cycles under tight deadlines.
- Started as an intern (3 months), continued as a monthly-paid contractor and was formally employed from 2025 to 2026.

PROJECTS

AdvAI — Capstone · UDABOL (2026)

AI legal contract auditing with verifiable citations. Hybrid search: BM25 (SQLite FTS5) + bge-m3 embeddings fused with RRF over 3,267 articles and 971 supreme court rulings — retrieval hit@8 went from 42.9% to 80%. The model only picks keys from the sources shown and the quoted text is inserted by the system: 82.9% correct citations and 94.6% of clauses with no severe error in internal evaluation.

Technologies: Next.js 16, React 19, TypeScript, Python, FastAPI, SQLite FTS5, Ollama, RAG, SSE, pytest

Homelab — Personal project · Infrastructure (2026)

A 24/7 home server running ten public services, operated by an AI agent (OpenClaw). Secure exposure via Cloudflare Tunnel (no open ports), private access over Tailscale, UFW and fail2ban. Services on Docker and systemd: media server, manga reader, Notebook (my AI-powered notes, open source) and more; timer-based backups.

Technologies: Arch Linux, Docker, systemd, Cloudflare Tunnel, Tailscale, OpenClaw, KVM

Notebook — Personal project · On my server (2026)

Notes as a chat with yourself, with memory: ask them, search them and study with flashcards. Open source. Hybrid search inside SQLite: meaning (sqlite-vec) + exact words (FTS5) fused with RRF, no separate vector database. 93 % Recall@6 measured on real data. Streaming answers with citations: every source jumps to the exact message and highlights the sentence the AI used; conversations keep context.

Technologies: Node.js, Express, SQLite, sqlite-vec, FTS5, RAG, Groq, Gemini, SSE, PWA, JavaScript

Rubik — Personal project · On my server (2026)

Practice the Rubik's cube and other puzzles, with official scrambles and a 3D viewer. Official scrambles and a 3D viewer with cubing.js, the cubing community's library, including its WebAssembly scramble generator. No CDN dependency: the library ships with the site itself, so it keeps working if an external service goes down.

Technologies: JavaScript, cubing.js, WebAssembly, HTML, CSS

rOS — Personal project · Linux (2026)

My own flavor of Arch, daily-driven and on its way to becoming a distro. Wayland desktop with niri and DankMaterialShell (Quickshell/QML); greetd greeter; Limine boot with custom branding. ros-update: Timeshift snapshot before updating pacman, AUR and flatpak; GPU mode switching (PRIME) and automatic power profiles.

Technologies: Arch Linux, niri, DankMaterialShell, Limine, Shell, systemd

EDUCATION

B.S. Systems Engineering — Universidad de Aquino Bolivia (UDABOL)

2021 – 2027 (expected) · Final semester; internal defense Dec 2026, external Mar 2027

Capstone: AdvAI — AI-powered legal contract auditing (hybrid RAG + LLMs).

Postgraduate Diploma in Software Development — Universidad de Aquino Bolivia (UDABOL)

2026 – in progress · 4 modules

Web Application Development — Solaning

2022 · Completed

Additional Training: Platzi, Coursera, Udemy, freeCodeCamp, Google for Education, W3Schools

LANGUAGES

Spanish (Native), English (Advanced (C1))

SOFT SKILLS

Problem solving, Autonomy, Working under pressure, Fast learner, Client communication, Technical writing