

IAGO PIRES

Software Engineer

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Brazil · Remote (UTC-4, US time-zone overlap)

SUMMARY

Software engineer with 5+ years across backend, frontend, and infrastructure; the last two focused on AI systems in production. At Datagrid (acquired by Procore) I designed the MCP integration that became the path for bringing Procore's tools into the platform, now serving thousands of users across hundreds of teamspaces. I work in TypeScript and Python and care about systems that hold up in production.

EXPERIENCE

Software Engineer · Datagrid AI (acquired by Procore)

May 2025 - Present · San Francisco (remote)

- Designed and built Datagrid's MCP (Model Context Protocol) integration end to end in Node/TypeScript: OAuth 2.0 + PKCE with dynamic client registration, session management, and a public server-registry API. After the acquisition it became the integration path for bringing Procore into Datagrid, now serving thousands of users across hundreds of teamspaces.
- Shipped Procore Enterprise as a first-class MCP-backed agent tool: SSO provisioning, request routing across Procore's zones, and a policy layer controlling which actions agents can take on live construction projects.
- Onboarded multiple engineers onto the MCP architecture, including forward-deployed engineers who build customer-specific MCP servers on top of it.
- Cut agent action-panel load time from 14 seconds to under one by replacing per-dropdown requests with a batched endpoint and a client-side request coalescer.
- Built LLM evaluation infrastructure: nightly regression runs across 170+ eval sets with weighted scoring and Slack delta reports, plus a 300-conversation text-to-SQL benchmark (BIRD-Interact).
- Integrated 7 enterprise systems (SharePoint, HubSpot, Autodesk ACC, Fieldwire, Trimble, Microsoft Planner, Outlook) as agent tools with human-in-the-loop approval panels, owning auth, pagination, and rate limiting for each.
- Built agent-driven browser validation workflows: coding agents drive the real app UI in Chrome to verify chat, MCP tool, and action-panel changes end to end.
- Deployed standalone MCP servers on AWS Lambda (Python/FastMCP) with per-environment CI auto-deploy via OIDC and CDK; built an MCP harness CLI the team uses to test agent actions locally.

Fullstack Developer · MVST

Jun 2023 - May 2025 · Munich, Germany (remote)

- Akina Health (€5M+ funded, NVIDIA-backed healthcare startup): built the patient-therapist web app and React Native mobile app, with Node/TypeScript backend integrations.
- Dennemeyer (IP platform serving enterprise clients including Boeing): engineered the new platform version in React and built a HubSpot integration automating lead creation for the sales funnel.
- RedCare (pharma): shipped careers and events sites in Next.js/TypeScript with Storyblok, from design to production in about 3 months.
- Zurhost: built a marketing platform that handled 70K+ unique visitors in a single day, plus a learning app with auth, course streaming, and progress tracking.

Research Intern, AI in Software Testing · Motorola Brasil

Jun 2023 - Jun 2024 · Manaus, Brazil

Part-time research position alongside degree, at UFAM's Motorola-funded IATS lab

- Pioneered AI test automation to replace manual QA verification in Android phone production, building a RAG pipeline with open-source LLMs (Llama) and embedding search in the early days of open-source LLMs.
- Prototyped AI-driven testing protocols on the Android SDK.

Freelance Software Developer

May 2022 - Jun 2023 · Remote

- Shipped React/Next.js products for a crypto/metaverse startup and small businesses, with serverless backends on AWS Lambda.

PROJECTS

- **quest** (github.com/iagopiresdev/quest): CLI for orchestrating, validating, and integrating parallel coding-agent work (TypeScript).
- **Spotter**: reliability engine for browser agents; classifies web-navigation failures into a taxonomy and applies recovery strategies, built on Playwright.
- **prompt-cache-lint**: CI linter that catches expensive Anthropic prompt-caching anti-patterns before they merge.
- **Voice AI pipeline**: real-time TTS/STT stack for a personal AI assistant; ElevenLabs synthesis with programmatic tone selection and script guardrails, Whisper transcription, hash-keyed audio caching, delivered as Telegram voice notes.
- **Local inference rig**: self-built multi-GPU workstation serving open models (Qwen 27B/35B dense + MoE via llama.cpp, incl. vision variants) with lifecycle automation and health monitoring.

EDUCATION

Federal University of Amazonas (UFAM) , BSc in Computer Science · Manaus, Brazil	2019 - 2024
Sprott Shaw Language College , ESL Certificate (CLB 5) · Canada	2019

SKILLS

Languages	TypeScript, Python, JavaScript
AI / LLM	MCP (Model Context Protocol), AI agents, LLM evals, RAG, embeddings, prompt engineering, voice AI (ElevenLabs TTS, Whisper STT), local inference (llama.cpp, Qwen)
Backend	Node.js, FastAPI, REST APIs, OAuth 2.0, workflow automation
Frontend	React, Next.js, React Native
Automation	Playwright, browser agents, CI/CD
Cloud	AWS (Lambda, CDK), Docker, Serverless, Kafka
Spoken	English (fluent), Portuguese (native)