



RAHARISON

Alain Rinah Patrick



+261 34 38 892 18



rah Alain4@gmail.com



Antananarivo

Senior Full-Stack Engineer & Solutions Architect

JavaScript/TypeScript Ecosystem & AI Integrations Expert

About me

Senior Full-Stack Engineer with over 6 years of experience, specializing in the architecture of complex, multi-tenant SaaS platforms and highly scalable systems. Expert across the entire JavaScript/TypeScript ecosystem, spanning from modern Frontends (React, Vue, Next.js) to robust Backends (Node.js, NestJS). Strongly innovation-driven, I design and deploy cutting-edge Artificial Intelligence architectures—utilizing Autonomous Agents, LLMs via OpenRouter/OpenAI, and Vercel AI SDK—to translate business objectives into scalable, high-performance technical solutions.

TECHNICAL SKILLS

- **Languages & Core :** JavaScript (ES6+), TypeScript, Python, HTML5, CSS3, PHP.
- **Frontend :** React, Next.js, Vue.js, Nuxt.js, AG Grid, Tailwind CSS, Zustand, Material-UI, FIGMA, React Native.
- **Backend & API :** Node.js (NestJS, Sails.js), PHP (Symfony), GraphQL, API REST (Swagger), WebSockets, SSE (Server-Sent Events), DataLoader.
- **AI & Data Engineering :** Agents Autonomes, Vercel AI SDK, OpenRouter API, OpenAI SDK, Prompt Engineering, Knowledge Graphs (Neo4j).
- **Cloud, Infra & DevOps :** Docker & Docker Compose, AWS (Lambda, S3, DynamoDB), Serverless Framework, Nginx, Firebase, MinIO.
- **Databases & Caching :** PostgreSQL (Prisma), MongoDB (Mongoose), Redis, ElasticSearch, MySQL.
- **Third-Party Integrations :** Stripe (Facturation), Keycloak (RBAC/Auth), Sentry, GoCardless, YouSign, Ringover, Pappers.

Portfolio: <https://alainraharison.vercel.app/>

PROFESSIONAL EXPERIENCE

09/2024 - Present

SENIOR FULL-STACK DEVELOPER / CONSULTANT CINCO AI (Madagascar)

PROJET 1 : OWLIANCE PLATFORM — AI-Driven Multi-Application B2B SaaS Ecosystem

- **Global Architecture & Multi-Tenancy:** Designed and engineered a centralized platform hosting multiple interconnected business applications with strict organizational data isolation (multi-tenancy) and Stripe recurring billing integration.
- **AI Engineering & Integration:** Architected and deployed an autonomous AI agent ecosystem leveraging Vercel AI SDK and the OpenRouter API. Built a centralized Prompt Repository and implemented real-time response streaming using Server-Sent Events (SSE).
- **VOX Application & AI Chat Interface:** Integrated a smart chatbot module into the frontend consuming custom AI agents. Developed a comprehensive system for building complex campaigns and highly dynamic questionnaires.
- **Data Visualization:** Modeled and rendered interactive Knowledge Graphs using XYFlow alongside analytics dashboards built with ECharts and Chart.js.
- **Security & Performance Tuning:** Centralized authentication, single sign-on, and role-based access control (RBAC) via Keycloak. Optimized GraphQL API performance by resolving N+1 query patterns using DataLoader and a distributed caching strategy with Redis.

Tech Stack : NestJS, React, Next.js, Python, **Vite, Vercel AI SDK**, OpenRouter, GraphQL, MongoDB, Keycloak, SSE, WebSockets, ElasticSearch, Tailwind CSS, Docker.

EDUCATION

Master's Degree in Software Engineering & Databases

Feb 2020

ENI Fianarantsoa | Madagascar

Bachelor's Degree in Software Engineering & Databases

Jan 2017

ENI Fianarantsoa | Madagascar

High School Diploma (Baccalaureate) - Science Stream

Août 2014

Lycée Ambatofinandrahana | Madagascar

LANGUAGES

- Malagasy: Native speaker
- French: Bilingual
- English: Professional / Technical

PROFESSIONAL EXPERIENCE

PROJECT 2: TACTDOCS — Construction Site Management Application

- Core Business Logic: Engineered a tailor-made business web platform focused on tracking on-site field operations, resource scheduling, and real-time inventory synchronization.

Tech Stack: Next.js, React, TypeScript, Zustand, AWS (Lambda, S3, DynamoDB), ElasticSearch, GraphQL.

PROJECT 3: RENEWABLE ENERGY APPLICATION

- Data Modeling & Optimization: Redesigned and optimized the internal CRM and lead management workflow for solar energy solutions. Implemented a Neo4j graph database to map and analyze highly complex energy network interconnections.

Tech Stack: React, Next.js, Neo4j, AG Grid, AWS Lambda, GraphQL, Material UI, React Native.

09/2020 - 04/2024

FULL-STACK DEVELOPER

HAIRUN TECHNOLOGY (MADAGASCAR)

- Corporate Domiciliation Solution: Co-designed and developed an end-to-end business registration platform, building the frontend with React/Vue and the backend utilizing Symfony and Node.js.
- Monetization & Accounting: Successfully integrated Stripe and GoCardless payment gateways, automating bookkeeping pipelines and billing generation.
- Third-Party API Ecosystem: Implemented secure integrations with business-critical third-party APIs including YouSign (e-signatures), Ringover (cloud telephony), Pappers (business data), and FrontApp.

Tech Stack: React JS, Vue JS, Symfony, Node.js, MySQL, Redis, Stripe, GoCardless, Yousign, Sentry.

07/2019 - 08/2020

DÉVELOPPEUR WEB

OTWOO MADAGASCAR

- ClicMoves: Developed a real-time parcel delivery and carpooling web application featuring real-time geotracking and route calculation

Tech Stack: Vue JS, Quasar Framework, MySQL, Sails JS, Google Maps API