Hermann Kao

Versatile developer, from product to infrastructure

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SUMMARY

What defines me most is adaptability: I pick up whichever language, framework and layer a product needs. Day to day in TypeScript, on web and mobile, but equally at ease in Java, C#, Rust, Swift or Python depending on the context. I work from the product down to the infrastructure (CI/CD, Kubernetes, cloud, monitoring) and have often been a product's only engineer. Since 2025 I have been wiring AI agents into delivery pipelines, from the ticket to a tested pull request.

PROFESSIONAL EXPERIENCE

Application integrator and DevOps engineer Since Aug 2026

LOCAM, B2B equipment financing (financial group) · Freelance (umbrella company) · Saint-Étienne

Part of the IT department's integration team, supporting the replacement of an AS400 system with iMX. Most of this work is done with Claude Code, within a setup that keeps a human in control.

- VTOM (Absyss) scheduling around iMX: integration with CASA Fircosoft, installation of iMX updates and patches.
- Integrated iMX with DocuSign and Ellisphere.
- Run the Tyk APIM: OpenAPI definitions of the APIs that expose external services (KYC, scoring, payment, company data).
- Incident and bug resolution on iMX and integration flows, including API slowness investigations replayed in a test environment and reported to the vendor.
- Automated Playwright tests for the iMX partner portal: navigation, request lookup, exports, and API response-time measurement under concurrent load.
- Redesigned the interface of the portal where external contractors submit and track their activity reports, with Claude Code: manager handwritten signature in the browser, Windows authentication (.NET, Blazor, Oracle).
- Set up an on-premise Kubernetes (k3s) cluster for proofs of concept, deployed with Ansible, and deployed Outline on it to replace MediaWiki.
- Contributed to the monitoring proof of concept for on-premise servers and the cluster: metrics and logs collected by Telegraf, then Grafana Alloy, through Kafka, and surfaced in Microsoft Fabric and Grafana.
- Ansible (Semaphore) automation across the on-premise estate, mostly RHEL 7 to 9: internal collection of reusable roles, Java updates, VTOM and metrics agent rollout, CVE assessment and remediation.
- AI-assisted blackbox penetration tests, then a proposed procedure to industrialise these audits with proper safeguards: a confined local model, tools scoped to the target, logging and human review.
- Proposed a secrets management framework, with a comparison of platforms (Vault, Azure Key Vault, CyberArk).
- Tooling that lets Claude Code work on VTOM and the servers without direct access: it writes the scripts, an agent runs them in the integrator's session and returns logs with secrets masked.
- Mapped the IT tools and their exchanges for the enterprise architect, generated as a diagram and an ArchiMate (Archi) import.
- Designed a progressive series of hands-on labs to train a work-study student as an application integrator: isolated RHEL environment, exercises, verification scripts and solutions.
- Scoped the upgrade of the internal GitLab, then planned its rebuild on the k3s cluster.

Fullstack developer Jul 2025 – Sep 2026

Versusmind, IT services company (Nancy) · Freelance, then umbrella company · Remote

- Rebuilt an international telecom equipment maker's website, moving from Sitecore to Next.js and Payload CMS.
- Maintenance of a Sitecore XP 10 / SXA platform for a national construction trade federation.
- WordPress and PrestaShop maintenance for a glazing e-retailer, including server administration (Debian, Cloudflare Tunnels, SSH hardening).
- Health-claim transmission interfaces to government services, with standardized flows and compliance constraints.
- Set up automated CI/CD deployment for a Flutter application.
- Internal tooling that generates activity reports and multi-project timesheets from the Azure DevOps APIs.
- Contributed to an internal AI agent orchestration project.

Mobile developer, then fullstack developer, then software architect Since Apr 2025

The After Cancer, health support app (United States) · Freelance · Remote

Hired for the mobile app, I later took over the backend and the infrastructure. I am now the product's only engineer: mobile, backend, back office, landing page, infrastructure and data. The app has grown past 300 daily active users.

- React Native (Expo) app with OneSignal, CometChat, Google Calendar and an integration with Healthie, a health data provider.
- AWS architecture (EC2, IAM, logging) with an API Gateway in front of external providers (CometChat, Stripe, OneSignal, Healthie).
- Multi-agent development pipeline (Hermes Agent), from user request to pull request. A lead agent reads the code and questions the user to pin down the need, then writes a plan that a business stakeholder approves. It then splits

the work between specialised agents, each owning a single area of the code, which develop with TDD within the existing architecture.
- Every pull request ships with its tests, visual evidence and a video tutorial for end users. I review, request changes or deploy, and the agent keeps that feedback in memory for later requests.
- Automated fixes for urgent bugs reported by Sentry, up to an opened pull request.
- First version of the pipeline, from Notion to GitHub with Claude Code, which took a feature from ticket to production in one week.
- Deployment pipeline evolution: Ansible scripts, then Kamal, then GitHub Actions to EC2 instances.
- Ephemeral review environment created on AWS for each pull request, removed after 3 days.

Freelance developer Jan 2023 – Dec 2024

Short assignments for studios and startups · Freelance

- IPLAYAGAIN: React Native mobile app, integration of third-party monetization SDKs (IronSource, Firebase, Facebook) and iOS App Tracking Transparency compliance.
- Clone (formerly Not So Dark): management back office, real-time messaging and API documentation, in a hexagonal architecture.
- Novéup: robo-assistance web app for elderly people, with real-time video and audio calls (LiveKit).
- SideApps: Flutter application, Firebase and Facebook integration, iOS 14+ ad-tracking compliance.
- KatGames: cross-platform React Native games app, Google OAuth authentication, Docker and GitHub Actions CI/CD.

Fullstack and DevOps developer Aug 2021 – Nov 2025

Nobo, home cleaning service (Palladium group) · Work-study, then freelance · Boulogne-Billancourt

A three-developer team running a platform at 2.5 M€ in revenue.

- Fully automated production and staging releases: GitOps deployment with Argo CD on GKE, managing Google Cloud and OVH servers.
- Optimized GitLab CI and Docker pipelines across several codebases, with a migration to a monorepo organization.
- Integrated RabbitMQ for asynchronous communication between services.
- Set up production error tracking (Sentry) and GDPR compliance.
- Migrated the test suite from Selenium to Playwright, with Detox for mobile end-to-end tests.
- Built a management back office and a customer acquisition funnel.
- Migrated two React Native apps from an Expo 52 monorepo to two independent Expo 57 apps with a hexagonal architecture.
- React Native mobile apps with geolocation, QR code and NFC tag scanning, and encrypted local storage.
- Offline SQLite outbox so that service validation, which triggers billing, survives poor connectivity.

System administrator Apr 2021 – Oct 2022

Snowtrust (Limoges) · Freelance

- OpenStack infrastructure and a Kubernetes cluster built from scratch.
- Secure remote access (OpenVPN) and a continuous integration pipeline for internal applications.
- Shared web and VPS hosting (Plesk, WHMCS), with automated provisioning in Python.

Fullstack and DevOps intern Apr 2020 – Sep 2020

Nobo (Palladium group) · Internship · Boulogne-Billancourt

- Set up automated, tested deployments with Bitbucket and Jenkins.
- Deployed an ELK stack to centralize and analyze application logs.
- Dockerized the microservices and added SonarQube to the quality pipeline.
- Vulnerability audits (OpenVAS) and remediation.

SKILLS

Front-end, mobile and desktop: TypeScript, React, Next.js, React Native, Expo, Flutter, SwiftUI, Rust / Tauri, TanStack Query, Redux Toolkit, Tailwind / NativeWind, Mantine UI
Back-end: Node.js, NestJS, Express, PHP, Python, Java (Spring, Vaadin), .NET (ASP.NET Core, Blazor), REST, GraphQL, OpenAPI, Kafka, RabbitMQ, Pub/Sub, Tyk (APIM), PostgreSQL, MySQL, Prisma, SQLite
CMS and e-commerce: Sitecore XP / SXA, Payload CMS, WordPress, PrestaShop
DevOps and cloud: Docker, Kubernetes (GKE, k3s on-premise), Argo CD, Ansible, Semaphore, VTOM, Kamal, GitHub Actions, GitLab CI, Jenkins, Bitbucket Pipelines, Azure Pipelines, AWS, Azure, Google Cloud, OVH, OpenStack, Cloudflare, Traefik
Systems and monitoring: Linux (RHEL, Debian), Bash, OpenVPN, Tailscale, ELK, Loki / Grafana, Grafana Alloy, Telegraf, Microsoft Fabric, Sentry, CloudWatch, OpenVAS
Testing and quality: TDD, Playwright, Detox, Selenium, SonarQube
Applied AI: Claude Code, Hermes Agent, AI agents, MCP, Ollama, LLM orchestration

PERSONAL PROJECTS

career-hub: LLM-generated targeted resumes, rendered to PDF with Typst, with semantic search on pgvector.
Agent orchestration kanban: Tauri desktop app to run several Claude Code sessions from a kanban board.
Éclore: iOS app that helps people quit smoking and cannabis, designed to never shame the user.

EDUCATION

Master of Science, Software architect, application developer 2024
ETNA, Paris

Bachelor's degree, Web and mobile project manager 2022
ETNA, Paris

Engineering programme, Automated systems 2019
ESSTI, Rabat

Preparatory classes, Mathematics, physics and mechanics 2018
ESSTI, Rabat

LANGUAGES

French: fluent | English: professional, TOEIC 925/990

ADDITIONAL TRAINING

- McKinsey Forward (communication and leadership)

INTERESTS

Hiking | Reading | Art | Photography | Car tuning | Electronics and home automation