

CATALIN WAACK

Independent AI Consultant and Product Engineer

20 years in tech | AI systems | Automation | Full stack products

hello@catalinwaack.com | catalinwaack.com | linkedin.com/in/catalinwaack | github.com/C4T4

Independent contractor | Projects across Germany, Europe, Hong Kong and the US | German and English

PROFILE

I have worked in technology for 20 years. At 14, I started with web security, studying exploits and SQL injection, and built my first websites while still at school. That led to formal IT training, computer science studies and an award in an interdisciplinary university competition for a dementia support concept. Since 2015, I have worked professionally across infrastructure, data, web development and product engineering; independently since 2018. I build AI enabled B2B and B2C products, automated workflows and internal tools, from requirements and architecture through implementation, integrations and production operations.

"In our network, he has an outstanding reputation. Personally, I can say that he is a one-man army. He's pragmatic, solves problems efficiently, and has the right experience."

Thomas Marbella, Founder and CEO, OneCode GmbH

SELECTED RESULTS

- 3 days to first build; 6 weeks to launch. Took ElectaCar from kickoff to a live EV product with an autonomous AI research system working in the background.
- Paying customers in 3 months. Took Syntax from concept to an operational B2C learning platform.
- REWE and EDEKA won. Built the Tailorwine B2B MVP used to demonstrate and sell the product.
- Used by the German government and 7 of the 10 largest DAX companies. Led product technology at VOXR.
- R&D with a former NVIDIA manager. Built real time audio motion signal processing across iOS, Python and server systems, with a patent objective.

SELECTED EXPERIENCE

ElectaCar

[AI Product Consultant / Lead Product Engineer | 2026](#)

- From kickoff to a working build in 3 days and a live product in 6 weeks. Owned product and technical delivery for a Hong Kong electric vehicle platform.
- Built an autonomous AI research system that runs in the background, discovers new vehicles, researches missing information across multiple sources, and turns it into structured catalog entries ready for human review.
- Designed the queues, retries, observability and review controls required to operate it reliably in production.

Heyamigo

[Creator / AI Product Engineer | 2026](#)

- Created an open source AI assistant that runs Claude, Codex, Grok or Gemini through WhatsApp and Telegram, with durable queues, memory, browser delegation, reminders and voice workflows.
- Published on npm with more than 2,000 downloads.

BREAKEATS LLC

[Product Engineer, Contract | 2024 to 2026](#)

- Worked directly with a former NVIDIA manager and holder of multiple patents on novel audio motion signal processing R&D with the objective of pursuing patent protection.
- Designed real time synchronization and pattern recognition across iOS and server systems, combining FFT based frequency analysis with accelerometer, gyroscope and headphone motion data.
- Built Swift and CoreMotion capture, Python signal analysis, latency aware matching, scoring algorithms, visual diagnostics, APIs and background processing.

FAMFAM via DAYONE

[Senior Frontend Developer, Contract | 2024](#)

- Built a music community and event app cofounded by the Keinemusik DJ collective in a cross functional team of more than ten.
- Implemented artist content, events, guest lists, reservations, invitations, profiles, push notifications and Stripe donations with React Native, Expo and TypeScript; the launch reached more than 12,000 users and the App Store Top 10 in Music.

SELECTED EXPERIENCE (CONTINUED)

Verlag des Österreichischen Gewerkschaftsbundes

Frontend Developer, Contract | 2024

- Worked with design and engineering to migrate an extensive portfolio of websites to Adobe Experience Manager.
- Implemented interfaces and reusable frontend patterns with React, Tailwind and BEM across a complex publishing environment.

Syntax Institut

Lead Product Engineer, Contract | 2023 to 2024

- Took a B2C learning platform from concept to paying customers in 3 months. Owned architecture, frontend, backend and the core commercial integrations.
- Built authentication, modular courses, video, assignments, progress tracking, certificates, Stripe payments and subscriptions with Next.js, TypeScript and Strapi.

Tailorwine

Senior Full stack Engineer and Product Manager, Contract | 2022

- Built the B2B MVP that helped the company win REWE and EDEKA as customers.

VOXR

CTO | 2017 to 2020

- Led product technology used by the German government and 7 of the 10 largest DAX companies, designed for unreliable live event connectivity.
- Progressed from business development trainee to CTO and helped pivot the product portfolio during the COVID 19 disruption.

TECHNICAL AND PRODUCT WORK

- AI agents and RAG: LangChain, LangGraph, Haystack, RAGFlow and custom retrieval pipelines designed and built from scratch.
- LLM integrations: OpenAI, Anthropic, tool and function calling, structured outputs and custom MCP integrations.
- Orchestration and evaluation: Temporal, memory, error recovery, deterministic quality gates, LLM based evaluation and human approval.
- Core stack: TypeScript, React, Next.js, Node.js, Python, FastAPI, PostgreSQL, Docker, Kubernetes and CI/CD.
- Security and systems: reverse engineering, penetration testing, web application security, system hardening, Linux and network administration.
- Delivery: product discovery, architecture, full stack development, data integrations and production operations.

ADDITIONAL PROJECTS

- AI workflow infrastructure prototype, 2026. Built a self hosted system with Python, FastAPI, Temporal, LangGraph, PostgreSQL and Docker, including policy controls, evaluation gates and explicit human approval.
- TwitchCraft, 2026. Prototyped the initial real time communication layer with LiveKit and WebRTC before the project moved to a custom architecture.
- Rivoara and Runtime Affiliate, 2025. Built a multilingual Shopify Hydrogen storefront and a multitenant affiliate platform for attribution, creator onboarding, commissions, analytics and payouts.
- NoMoreApply, 2024. Built the public product and production infrastructure for an engineering community with more than 80 members, including applications, peer review and lifecycle automations.
- Earlier technical roles, 2015 to 2017. Frontend delivery, medical data work, Linux and network administration, plus an award winning dementia support concept.

EDUCATION AND LANGUAGES

Computer Science studies, Technische Universität Braunschweig (2014 to 2016) | Technical college entrance qualification, IT (2014) | Government certified technical assistant for IT, BSZ Stendal (2011 to 2013)
 German (native) | English (professional) | Spanish and Romanian (intermediate)