

Norman Thomas.

Head of Engineering · hands-on full-stack & AI builder

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Munich, Germany

Head of Engineering who never stopped building. I lead teams and own technical direction — from cloud architecture to the last line of frontend — and I ship: data products, internal tooling, and now AI agents.

Open to what's next · Permanent roles from October 2026 · Freelance earlier — part-time to start, flexible · Remote / work-from-home

EXPERIENCE

Head of Engineering **Open Publishing GmbH · Munich, Germany**

May 2019 – Present

Lead up to 12 engineers (development, infrastructure/ops, QA) for Open Publishing's B2B software for publishing houses — while staying hands-on. I set architecture and own the move to the "new world": cloud, microservices and a modern frontend.

- Own the transition from a part-legacy C++ monolith to AWS, Python microservices and TypeScript/React — a more open, maintainable, extensible platform that keeps the monolith itself leaner and more adaptable.
- New-stack services ship with dramatically faster deploy and feedback cycles — tight need → build → verify → deploy loops and a far better developer experience than waiting on long monolith builds.
- Lead and mentor the team, levelling up engineers — junior and senior — in cloud/AWS, data engineering, React and Python.
- Client-facing capabilities like these — rarely one feature alone, but the whole set — have repeatedly helped win over and impress new publishing-house clients evaluating the platform.

Catalog Analytics — Built from scratch — helps publishers catch catalog and metadata problems before products reach the shelves. AWS serverless (Lambda, API Gateway, DynamoDB, S3, CloudFormation) in Python/FastAPI, with a multi-language React/TypeScript frontend.

Financial Reporting Dashboard — Gives publishers clarity on their finances — flexible queries, filters, visualizations and saved favorite views, over a Redshift backend.

Mailing Tool — Sends sample ebooks to journalists and reviewers for press and reviews.

Python · FastAPI · TypeScript · React · AWS · Microservices · DynamoDB · SNS · SQS · CloudFormation · GraphQL

Senior Full-Stack Developer **Open Publishing GmbH · Munich, Germany**

Jun 2013 – May 2019

Senior full-stack developer in a distributed, agile Scrum team — full ownership from concept and API design through implementation, tests and deployment. Pioneered the company's first microservice and its early ML work.

- Built the company's first microservice (In-Book Marketing) end-to-end — the pioneer work that set the template for every service since.
- Introduced GraphQL to the team's projects — well received by developers and clients.
- Brought in NoSQL (MongoDB, AWS DynamoDB) where relational models were a poor fit.
- Ran early data-science / ML studies on product and pricing data.

In-Book Marketing — The company's first microservice — built end-to-end (Python, Flask, GraphQL, MongoDB; React frontend; fully tested; deployed on Docker Swarm), with an AWS-native prototype (Lambda, DynamoDB, S3). The pioneer work that paved the way for every service since.

Book Pricing & Sales Analysis — A data-science study of what pricing works best for books/ebooks — clustered by genre, publication age and more across the DACH market; findings presented to publishers at a book fair. (pandas, scikit-learn, Keras, PyMC3)

Python · JavaScript · C++ · Flask · GraphQL · React · MongoDB · MySQL · Docker · pandas · scikit-learn · Keras

Full-Stack Developer **GRIN Verlag GmbH · Munich, Germany**

Dec 2009 – Jun 2013

Full-stack developer through a period of rapid feature growth on GRIN's publishing platform — the work that made it possible to white-label the software as SaaS, which became Open Publishing.

- Delivered a fast wave of full-stack feature expansion (C++ and JavaScript) on the core publishing platform.
- That groundwork enabled white-labeling the software as a SaaS product for other publishers — the seed that grew into Open Publishing, later founded and spun off as its own company.

C++ · JavaScript · MySQL

Built the EJJE (英和和英辞典) English–Japanese dictionary feature end-to-end — both frontend and backend.

- Built the EJJE English–Japanese dictionary end-to-end, including a parser for a proprietary binary file format on the backend.
- Still in production today, largely unchanged.

Java EE · Servlets · JSP · Tomcat · PostgreSQL

PRODUCTS

Ergo

A transparent AI agent you can actually see think.

Launching ~Aug 2026

An AI agent with a command-console aesthetic — every token, every cent, every tool call visible. Model-agnostic: pick OpenRouter, OpenAI or Anthropic. Tool-calling layer designed and implemented by me.

AI Agent · LLM · Tool-calling · OpenRouter · TypeScript · ergo-ai.app

Papercut

Your physical mail, digitized — AI does the reading.

Live

Snap a letter and AI does the rest — a summary, the actions that matter (pay this, call that), and a live dashboard of your postal mail. Bills become scannable payment QR codes (no typing recipient, IBAN or reference), due dates get tracked, junk is silenced but never lost, and everything — tax letters included — is one multi-facet search away on iPhone, iPad or Mac. Fighting Germany’s obsession with paper.

AI · OCR · iOS · macOS · Payments · Search · papercut.ink

Walko

A local guide in your pocket — zero planning.

Live landing · app launching ~Aug 2026

Discovers interesting places and balances them into a tailored, practical itinerary — solving for available time, opening hours, distance and co-location, weather, your interests, and how popular or unique a place is, all at once.

AI · Travel · LLM · Mobile · OpenRouter · walko.guide

What Was I Thinking

Catch a thought before it’s gone — straight from your wrist.

In design · concept

Tap once on your Apple Watch and speak. The app transcribes what you said, categorizes it, and groups it with related thoughts — then nudges you in the evening to build on the ones worth keeping, if you want to. No app-fumbling, no ideas lost because typing was too slow.

iOS · watchOS · AI · Voice · Transcription · whatwasithinking.app

SKILLS

Languages	Python · TypeScript · JavaScript · C++
Frontend	React · TypeScript · Astro · CSS
Backend & APIs	Microservices · GraphQL · REST · FastAPI · Flask
Cloud & Infra	AWS Lambda · S3 · DynamoDB · EC2 · API Gateway · SNS · SQS · CloudFormation · Serverless
Data	Pandas · NumPy · scikit-learn · Data mining · MySQL · MongoDB · InfluxDB
AI / LLM	LLM integration · Agents & tool-calling · RAG · LangChain / LangGraph · OpenRouter / OpenAI / Anthropic
Practice	Architecture · Team leadership · Mentoring · Testing (Unit, TDD, BDD) · Agile/Scrum

CERTIFICATIONS

Into ML/AI early — the deeplearning.ai specialization and applied data science back in 2017–2018 — and still at it: recent IBM coursework in agentic AI, RAG and LangChain/LangGraph (2026) that feeds directly into Ergo.	
Building AI Agents and Agentic Workflows Specialization	IBM · Jun 2026
Fundamentals of AI Agents Using RAG and LangChain	IBM · Apr 2026
Bayesian Statistics: From Concept to Data Analysis	Coursera · 2018
Applied Text Mining in Python	Coursera · 2018
Neural Networks and Deep Learning	deeplearning.ai · 2017
Improving Deep Neural Networks	deeplearning.ai · 2017
Structuring Machine Learning Projects	deeplearning.ai · 2017
Machine Learning (Andrew Ng)	Stanford · 2017

LANGUAGES

German (Native) · French (Native) · English (Fluent) · Creole (Conversational) · Japanese (Conversational) · Chinese (Beginner) · Modern Greek (Beginner) · Persian (Beginner)

EDUCATION

Computer Science (Diplom)	University of Kassel · Kassel, Germany	Sep 2001 – Mar 2007
German GPA 1.3 — equivalent to US GPA 4.0 — A mobile authentication system using event-synchronous tokens.		
Hübner Scholarship	Tongji University · Shanghai, China	Sep 2005 – Apr 2006
Study of Chinese language and culture.		