

Alexander Seipel

AI and software engineering · full stack engineer and technical lead

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Prague, Czechia · CET · remote worldwide



Ten years of engineering. Four and a half of them as co-owner and CTO of a startup, sole engineer throughout. Then a year of client projects at a consultancy, and today a core banking frontend at a bank. I have put machine learning into production and moved a shop onto auto-scaling AWS. I work out where AI pays off, then I build it.

Core stack React · TypeScript · Python · Java · AWS · Terraform · LLM APIs and agents

EXPERIENCE

09/2024 – now
Prague, Czechia

Commerzbank AG – Engineer, Development

Digital Technology Center · online banking · two teams

- **Core banking frontend.** Sole frontend engineer for Transaction Overview, the transaction list millions of customers reach after they log in. New features, refactoring, defect fixing, and the move of the toolchain from React Scripts to Vite.
- **Greenfield architecture.** Architected the React frontend of a new advisory platform from the first commit and built whole modules alone, on the bank's internal design system.
- **API design.** Write the OpenAPI specifications with the backend teams and model the data behind them for efficient communication. Also work in the Java backend.
- **Accessibility.** Every feature ships to WCAG conformance, at the standard a bank has to meet.
- **Enablement.** Train colleagues on AI development tools. Onboard and mentor developers in a newly built team.

08/2023 – 08/2024
Berlin, Germany

MaibornWolff GmbH – Senior Software Engineer

IT consultancy · digital design & engineering · three clients in one year, three stacks

- **Supply chain.** Built the frontend of an import tool for supplier and farm data with React, AG Grid and GraphQL. First direct client work: I ran the requirements workshops and defined the features before anything got built.
- **Design system.** Built a token-based design system end to end for a testing and certification group. Figma tokens synced through Git, StencilJS web components documented in Storybook, and wrapper packages that let React, Angular and Vue teams pull one version.
- **Healthcare.** Extended an Angular platform for patients and clinicians at a therapy provider with clinics worldwide. Had never written Angular, was productive within days, and mentored a junior developer.

01/2020 – 06/2024
Nuremberg,
Germany

Brandl Nutrition GmbH – Co-owner and CTO

Personalised nutrition · sole engineer for product engine, shop, infrastructure and analytics

- **Personalisation engine.** Built the platform that turned a customer questionnaire into an individual supplement recipe, and rebuilt the questionnaire itself in React.
- **Fulfilment automation.** Replaced manual PDF templates with a chain that ran itself: recipe calculation, production sheet, individual back label, delivery note, DHL hand-off. Django backend on Docker, with an automated hand-off to each new manufacturer.
- **Scalable architecture.** Moved the platform from one rented server to auto-scaling AWS: EC2, Aurora RDS, CloudFront and WAF, all managed with Terraform. Two weeks' notice, before a national television appearance.
- **Headless commerce.** Replaced Magento with Shopify as a headless backend behind a custom Gatsby and React storefront: own cart, Contentful as CMS, subscriptions and automated discount campaigns.
- **Data-driven iteration.** Ran the analytics and marketing stack: A/B tests, newsletter automation, custom dashboards. Analysed repurchase rates and taste preferences in Python.

- **Product ownership.** As co-owner I shaped the range. The plain protein product I pushed for became the best seller.

10/2016 – 12/2019 Nuremberg, Germany	Immowelt – Full Stack Developer and Data Scientist Axel Springer group · big data team · started as intern • Machine learning in production. Collected the data, trained the models, deployed them: price estimation, image classification, extraction from photographed energy performance certificates. TensorFlow, Keras, PyTorch, scikit-learn, CUDA on the GPU. • Public analytics. Built "Markt und Preise", where users compose their own charts over Germany-wide rent and purchase prices. C# and .NET on ClickHouse, with a custom JavaScript frontend. • Fraud prevention. Built a mobile TAN flow, integrated external identity verification services, and wrote the Python services behind the detection. • Data platform. Worked across SQL Server, Vertica, Couchbase, MongoDB and ClickHouse. Built the real-time processing library that lets a change in MongoDB start a downstream pipeline. • Internal tooling. Extended a monitoring dashboard that reported system diagnostics, usage statistics and fraud metrics across the applications. C# and ASP.NET MVC.
03/2016 – 09/2016 Nuremberg, Germany	Benjamin Lochmann New Media – Assistant SEO Manager Search engine optimisation for client websites, online and social media marketing
04/2016 – 08/2016 Regensburg, Germany	University of Regensburg – Research Assistant, Information Retrieval Search prototype with Apache Solr and learning-to-rank · Twitter log data analysed in R

SKILLS

Services	AI consulting · AI software · software development · technical lead · accessibility
AI and data	LLM APIs, agents, MCP, RAG, vector search, evaluation, open models, TensorFlow, Keras, PyTorch, scikit-learn
Languages	TypeScript, JavaScript, Python, Java, C#, SQL
Frontend	React, Next.js, Gatsby, Angular, Vue, GraphQL, web components, design systems, WCAG
Backend	Node.js, Django, FastAPI, .NET, REST, OpenAPI, Stripe, Shopify
Infrastructure	AWS, GCP, Terraform, Docker, CI/CD, serverless, PostgreSQL, ClickHouse, MongoDB
Method	Requirements engineering, client workshops, architecture, mentoring, onboarding

PROJECT

implotse.de	Patients book vaccination appointments at pharmacies. Sole engineer, AI-assisted from the first commit. I built out the GDPR side too: legal logging and automated data disclosure.
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EDUCATION, LANGUAGES, INTERESTS

2013 – 2017	Bachelor of Arts, Media Computer Science and Information Science, University of Regensburg. Final grade 1.3 (German scale, 1.0 is best). Thesis: learning-to-rank to improve Twitter search.
Languages	German (first language), English (C1)
Interests	Bodybuilding. I plan my meals to the gram and test what changes. The same habit goes into the software.

REFERENCES

"Mr Seipel's performance earned our full recognition at all times and in every respect." Employment reference, Immowelt AG · translated	"He found excellent solutions for all arising problems without exception." Employment reference, MaibornWolff GmbH
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