

Daniel Sangermann

Software Engineer: full stack, AI agents, real-time computer graphics

Frankfurt am Main, Germany

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 LinkedIn  GitHub

PROFILE

Computer scientist (B.Sc., TU Munich) and full-stack engineer focused on TypeScript, Next.js and PostgreSQL. I built a business application for tax firms alone and brought it into production, including AI agents and document search, and I work with coding agents every day. Also one year of real-time computer graphics on embedded systems at BMW.

EXPERIENCE

Dec 2025 – present	Founder and CTO, PrimeBalance, Frankfurt am Main Software for tax firms (bookkeeping, month-end closing, bank reconciliation), designed, built and run on my own. Live at app.prime-balance.de. • Platform: Next.js, React, TypeScript, Node; PostgreSQL with row-level security; Stripe. • AI: own agent runtime with tool calling and MCP; OCR; document search with pgvector. • Operations: Vitest, Playwright, GitHub Actions; containers on Google Cloud Run. • Also: DATEV and ELSTER integrations; scanner app with React Native and Expo. • Workflow: Claude Code with rules and review gates; design from Figma via MCP.
Jun 2025 – May 2026	Computer Graphics Engineer, BMW, Munich • Built a full real-time render system with render passes for distributed graphics on embedded Linux (lighting domain) in C++ and OpenGL; developed on Windows, WSL and Linux. • Master-slave architecture: the master runs the simulation, the slaves render; clearly defined data flow, integrated into the BMW software ecosystem. • Desktop front ends in C# with .NET and WinForms.

PROJECTS

2026	Bachelor's thesis: Didactic Concepts in Machine Learning, TU Munich Five-week course part on machine learning and data science with course material, automated checks and a grading script. Python, pandas, scikit-learn, Hugging Face Transformers.
Jan 2025	Physics simulation, Game Physics course, TU Munich Mass-spring systems, rigid bodies with collisions and the heat equation, built as a team in C++ with GLM.
Dec 2024 – Feb 2025	Data analysis for battery cell development, Seminar with BMW Data engineering, data science, machine and deep learning in one: data transformation, feature engineering and models on battery data. Python, pandas, scikit-learn, PyTorch.
Personal project	Stock price prediction with an LSTM LSTM network in PyTorch for the ten largest S&P 500 companies; FastAPI, Next.js, AWS ECS Fargate.
Dec 2023 – Feb 2024	Image processing with SIMD, TU Munich Brightness and contrast of images in x86-64 assembly and C with Intel Intrinsics.

EDUCATION

Oct 2021 – Sep 2026	B.Sc. Computer Science , Technical University of Munich
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SKILLS

Languages	TypeScript, JavaScript, Python, C++, C, C# (.NET, WinForms), x86-64 assembly, SQL, Java
Web and mobile	Next.js, React, Node.js, Tailwind, Prisma, PostgreSQL, Stripe, React Native, Expo, Figma
AI and data	LLM agents (tool calling, RAG, MCP), Claude Code, ML and DL with PyTorch, scikit-learn, pandas
Graphics, simulation	OpenGL, GLSL, WebGPU, GLM, real-time rendering, distributed graphics on embedded systems, physics simulation, Unity, SIMD
Operations, quality	Linux, Docker, Google Cloud Run, AWS (ECS, S3, ECR), GitHub Actions, Playwright, Vitest
Spoken languages	German (native), English (C2), French (B2)