Marlon Kranz

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Hamburg, Germany · open to relocation



> Software engineer graduating in Nov 2026 (B.Sc. Information Systems) and seeking a full-time SDE role from Jan 2027. Working student at Adobe on distributed Java services on AWS, where I own the migration of a production pipeline to GitOps on Kubernetes.

PROFESSIONAL EXPERIENCE

Cloud Software Engineer (Working Student) · Adobe · Hamburg — Since 07/2026
- Develop 5 event-driven Java services used by millions across Adobe (e.g., commenting, sharing) on AWS (EKS, MSK, Aurora, OpenSearch, S3), with 30+ production deployments and regular code reviews
- Own the pipeline migration from Spring Cloud Data Flow to GitOps on Kubernetes: mapped the poorly documented system, wrote the design (no downtime for 9 of 10 apps), and refined it with senior engineers into a 5-month roadmap
- Found that neither backup could fully restore its hardest piece, a stateful app; rebuilt its state on a Kafka Streams changelog for fault tolerance and scale-out across instances with smaller, faster-to-rebuild state
- Caught and fixed a race condition where concurrent CI and release runs could ship unreviewed builds to production; also fixed recurring Jenkins outages and jobs that overwrote each other
- Fixed a years-old account-linking bug in sharing suggestions that a misconfigured test had hidden as flaky
- Helped build the team's AI harness (repo context on testing, CI/CD, architecture, AI pitfalls) for developers and AI reviews
- Created a team repo of AI agent skills for maintenance and repeatable tasks; the team now uses and contributes to it
- Helped clean up 4 inherited services that arrived in poor shape by fixing bugs, unifying their CI/CD (Jenkins, Argo Workflows) and secrets handling, finishing major breaking upgrades, and working down a large security backlog
- Extended monitoring (Splunk, Grafana, New Relic) and built most of a multi-region CI/CD pipeline for new AWS regions

Software Engineer (Working Student) · OTTO GmbH & Co. KG · Hamburg — 08/2025 – 06/2026
- Built Java/Spring Boot microservices in hexagonal architecture for OTTO's product-content platform, replacing a legacy Oracle-based monolith with event-driven data flows over Kafka (AWS ECS, Lambda, S3, MongoDB Atlas, Terraform)
- Set up AI code reviews and custom AI agents for the team; patched vulnerabilities flagged by Wiz.io and Dependabot
- Helped build a new media asset service that consumes product-data events from Kafka, validates them, prepares uploads to a downstream media system, and reconciles its state with that system
- Migrated a product-data template service off internal messaging to read external source topics directly; implemented a public, OpenAPI-documented REST API for product data

Software Engineer (Working Student) · msg.life AG · Hamburg — 10/2023 – 07/2024
- Served as the only German-speaking developer on msg.Pension Data, linking German clients and product owners to the Slovenian team; owned API and functional testing, manual QA, and code reviews
- Grew from small fixes to larger bugs and features in Java; designed and built a documentation-as-code pipeline as a first standalone project and worked on the Vue.js frontend

EDUCATION

M.S. Computer Science (online, part-time) · Georgia Institute of Technology · Admitted — Starting 01/2027

B.Sc. Information Systems (German grade 1.97, 1.0 = best) · University of Hamburg — 10/2022 – 11/2026 (expected)
- Thesis (submitted 10/2026): BPMNscript: A Domain-Specific Language and Compiler for BPMN 2.0 (open source)
- Teaching Assistant, Software Engineering II (04/2026 – 07/2026)

Computer Science – Exchange Program · San Diego State University, California · GPA 3.87/4.00 — 08/2024 – 05/2025

PROJECTS & OPEN SOURCE

Dux Shell · Open-Source Contributor · Linux desktop shell (Wayland), 8.9k GitHub stars (Go, QML) — Since 08/2026
- Merged 66 pull requests, several feature-sized, across 7 repositories (theming, compositors, notifications, docs)
- Built a NetworkManager editor on par with other Linux desktops, Windows, and macOS, with 802.1X enterprise networks
- Rebuilt the system monitor and its Go backend on Linux kernel interfaces (per-process GPU, network, disk; drive health)
- Report bugs with root-cause analysis (20+), support users in forums and support channels, and join design discussions

BPMNscript · DSL & Compiler for BPMN 2.0 · Bachelor's Thesis (TypeScript, Langium)
- Built a compiler from a textual process language to BPMN 2.0 XML and an importer that restructures arbitrary process graphs into block-structured code (dominator analysis), plus a VS Code language server and a CLI
- Evaluated round-trip fidelity in a reproducible pipeline: 6,000 fuzz-generated programs and 6,000+ real-world models (mined from 17k GitHub repositories), each deployed to Operaton in Docker

devline · Open-Source Multi-Agent Development Workflow · Claude Code Plugin
- Takes a feature from spec and TDD plan through parallel implementation in git worktrees, review, and a security audit
- Still in daily use and growing: 7 agents, 19 skills, and security hooks

TECHNICAL SKILLS

Programming Languages: Java, Kotlin, Go, TypeScript, JavaScript, Python, QML, SQL, Bash
Frameworks & Libraries: Spring Boot, Spring Cloud Data Flow, Apache Kafka, React, Next.js, Vue.js, JUnit, Testcontainers
Cloud & Infrastructure: Linux, AWS (EKS, MSK, RDS, Aurora, SQS, S3, ECS, Lambda), Kubernetes, Argo CD, Argo Workflows, Argo Rollouts, Jenkins, Git, Terraform, Vault, Docker, GitHub Actions, Splunk, Grafana, New Relic
Databases: PostgreSQL, MongoDB, Amazon Neptune (graph), OpenSearch, Oracle
Concepts: Data structures & algorithms, object-oriented design, distributed systems, event-driven architecture, hexagonal architecture, REST API design, compilers & language servers, GitOps-based CI/CD, infrastructure as code, TDD, Scrum
Spoken Languages: German (native), English (fluent, C2)