

Emilia Matz

Contact Information

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Professional Experience

Otto GmbH&CoKG

10/2025 - today

Software Developer

Team Cortex is responsible for foundational findability at Otto, impacting approx 58 Teams and all users by providing category and filter information

- currently tasked with designing and documenting mid to long term vision and independent research, scouting for the team and making complex topics accessible
- Developed and implemented *Belay*, an enterprise knowledge graph containing all data from Jira, Git and Backstage during a two week hackathon and exposing it via MCP to Agents to aid the all roles in the PDLC.
Currently in MVP phase for company wide adoption
- developed and implemented stateful EC2 scaling for KStreams applications (default at Otto), and contributed Terraform module to internal base setup
- reduced deployment times from 40 minutes to 30 seconds (how: see above)
- created a knowledge graph (Neo4j) of all product data, approx 40m nodes and 650m edges, by connecting input data, rule engine and output data for the first time in otto history, discovering and mapping major data quality issues
- visualized our product graph for key stakeholders to support PMs and relieve pressure from the team, by privately implementing *Skei*, a high performance frontend for Neo4j, using WebGPU and server side layout
- resolved team tension (high mental load) caused by large volume of new documentation for meetings and stories, by implementing an agent supported knowledge management system, now actively used by all roles and based on PARA
- Contributed sophisticated skills and agent harness to company wide APM

Skills Kotlin · Agentic Engineering · Neo4j · Research · AWS · Terraform · Python

10/2024 - 10/2025

Software Developer

Team Hopper is responsible for the real time auctions of sponsored product ads at Otto.

- Standardized and accelerated onboarding in a small but growing 3-person team.
- Assumed responsibility as “god parent” for key features like “Keyword Targeting”
- Identified cause of 45% unspent ad budget and need for “Custom Pacing” collaborated with analysts and stakeholders to define it, and independently designed and implemented the feature from concept to production.
- The solution was adopted as a strategic roadmap foundation by the team.
- Contributed to systems generating tens of millions of euros annually.

Skills Kotlin · Github Actions · Vue · AWS · Docker · Python

MatzWorks

04/2026 - today

Founder / Developer

exploring the viability of various personal projects

- *Adra*, fully on device meal identification, recipe decomposition and macro tracking

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superluminar

04/2024 - 07/2024

Senior IT-Consultant

At one of Germany's largest online retailers for sports equipment.

- Migrated 12 legacy PHP apps from small cloud providers to AWS as part of MAP.
- Containerized pet VMs, consolidated databases, and deployed on ECS.
- Completed end-to-end migration in under 6 weeks with part-time client engagement.
- Achieved ~60% cost savings and improved security, reliability, and reproducibility.
- Leveraged high automation to accelerate delivery and reduce manual overhead.

Skills: CDK · AWS · ECS · Docker · TypeScript · Python · Gitlab CI

Netlight

10/2021 - 03/2024
various positions

Senior DevOps Engineer

- Helped a newly formed platform team get up-and-running
- Migrated to a new Kubernetes logging stack and upgraded the foundational cluster infrastructure.
- Took on standalone infra projects to reduce load on the core platform team.
- Aligned closely with the tech lead to balance technical and strategic direction.

Skills: Ansible · Datadog · CentOS · Splunk · ELK · AWS · Python · Jenkins · Kubernetes

02/2023 - 09/2023

Technical Designer at [REDACTED]

- Co-led one of 70, 10-person interdisciplinary teams building a digital twin of a large supply chain.
- Designed system architecture and collaborated with 70 other teams
- Improved system performance 30x and reduced costs by 30% within 3 months.
- Took over team rebuilding after half the developers left, ensuring delivery continuity.

Skills: Apache Kafka · Spring Boot · GCP · Python · Node.js · MongoDB · Java · JavaScript

10/2022 - 01/2023

Techlead

- Initiated and led a project turning a hackathon win into a lasting internal product.
- Built a Neo4j-based knowledge graph to explore internal company data.
- Managed a rotating team of consultants, with a focus on teaching and mentoring.
- Enabled interactive data exploration around consultant profiles and project history.

Skills: Neo4j · NLP · AWS · Python · Gitlab CI

10/2021 - 10/2022

ML-Engineer

- Built and deployed an MLOps pipeline for predictive maintenance in 3 weeks.
- Designed architecture, CI/CD, data pipelines, and APIs for ML model serving.
- Developed serverless and containerized Python APIs for internal and partner use.
- Collaborated tightly with data scientists to bring models into production.

Skills: AWS · Python · Sagemaker · GitlabCI · Docker · Terraform

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DVZ-MV

03/2021 - 09/2021 **Master Thesis:** “Development and implementation of a framework for simulating the behavior of distributed software systems under load”, Grade: 1,0

03/2019 - 09/2020 **Bachelor Thesis:** “Usage of self-contained systems in the electronic application assistant of the MV-Serviceportal“, Grade: 1,0

Working Student:

Technical Support of an internal project aimed at the adoption of Docker and Kubernetes based workflows for E-Government Applications, based on the results of the internship.

09/2018 - 02/2019 **Internship:**

- Developed and deployed a full OpenShift-based CI/CD pipeline.
- Achieved 60% shorter lead times vs. the legacy system.
- Created a proof of concept that drove a company-wide shift to containers.
- Standardized Docker/Kubernetes-based workflows later adopted company-wide.

Skills: Java · Python · Jenkins · Docker · Kubernetes · Openshift · Selenium · Artifactory

HS-Wismar

03/2018 - 09/2018 **Student Assistant**
Back-End Engineer - Stud.IP

Education

09/2016 – 09/2021 University of Applied Sciences Wismar
M. Sc. Applied Computer Science Grade: 1,3, Top of the Class
B. Sc. Applied Computer Science Grade: 1,5, Top of the Class

09/2015 – 08/2016 Industrial Clark Apprenticeship at Foodlogistik GmbH

08/2011 – 07/2015 Geschwister-Scholl-Gymnasium Bützow

Skills:

Programming	Python, Java, JS / TS, Go, PHP
Infrastructure	AWS, GCP, VMware VSphere, Docker, Linux
Automation	Gitlab CI, Github Actions, Jenkins
IaC	Terraform, CDK
Agentic Eng.	OpenCode, Pi, multi agent harness, multiple self hosted LLMs on dedicated hardware
Certifications	AWS Solutions Architect, Associate
German	Native Speaker
English	Proficient