

Backend developer with 8+ years of experience across freelance and full-time roles. Primary stack is **Python/Django** with **Celery, Redis**, and **PostgreSQL**. Deployed on **Kubernetes** and **Docker** across AWS, Azure, and GCP. Has shipped a production ERP integration (12K clients, 25K products), an AI-powered interview platform with custom embeddings, a Flutter mobile app, and multiple Angular frontends. Comfortable operating as a product owner — handling architecture, customer support, and deployment in one role.

✦ BUILDER

Reliable systems, delivered on time.

Product owner of a production ERP-to-webshop integration for three years — 12K clients, 25K products, sub-minute sync cycles, including customer support and same-day hotfixes when a notoriously unreliable third-party API breaks. This pattern has defined most of the work: take full responsibility for a system, ship it, and keep it running.

5 years product owner experience	8+ years programming experience	C2 German and English professional level
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BACKEND & API

Python	Django	DRF	Celery	Redis	PostgreSQL
FastAPI	RabbitMQ	MongoDB	Pydantic	gunicorn	
uvicorn					

DEVOPS & CLOUD

Docker	Kubernetes	ArgoCD	Helm	Terraform
GitHub Actions	GitLab CI/CD	Nginx	Traefik	
Amazon ECR				

CLOUD PLATFORMS

AWS (ECR · EC2 · S3 · EKS · Lambda)
Azure (AKS · Entra ID · App Services)
GCP (Compute · GKE · Speech-to-Text) · Hetzner

FRONTEND & MOBILE

Flutter	Dart	TypeScript	Angular	Bootstrap
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OTHER LANGUAGES

C++20	Java 8/11/17	Kotlin	PHP	Go
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PROJECT SHOWCASES

Selectline ↔ Shopware Integration

Django · DRF · Celery · Redis · Kubernetes · Docker · Amazon ECR · PHP

Product owner with 3 years of experience on this system. Bidirectional sync between **Selectline** (German ERP) and **Shopware** (webshop) — orders, clients, products, and images. Handles ~50 orders/day across 25K products with ~2.5 images each, all synchronised under one minute. The **Selectline API** is unreliable by design, so the entire sync pipeline is idempotent with layered retry logic. Also responsible for customer inquiries, product roadmap, and hotfix delivery. Separately developed a **PHP plugin** for Gewerbeschein handling within Shopware.

Interview Transcription & AI Chat

Django · Celery chains · OpenAI embeddings · agno (custom fork) · pgvector · PostgreSQL

Platform for a client that conducts high volumes of interviews. Video recordings are processed through **Celery chains** that coordinate transcription via an external provider. Uploaded context documents (interview guides, reference material) are embedded using **OpenAI** and a custom-tweaked fork of **agno**, stored in **pgvector**. A tag system on each interview entity controls which embedding segments serve as context — the AI chat feature on the detail page only retrieves what is relevant to that specific interview.

Factory ERP Mobile App

Flutter · Dart · Django REST backend

Production cross-platform app for an on-site factory in Saarbrücken. Used daily by workers for stock tracking and task management. Full **Flutter** implementation with **Django** backend providing all data through REST APIs.

Docker Build: 8 min → 20 sec

Docker · Shell · Layer caching · Multi-stage builds

Took over a CI pipeline with 8-minute build times. Rewrote the shell scripts, restructured **Dockerfiles** for optimal layer caching, and introduced **multi-stage builds**. Result: 20-second builds. The approach has since been applied across multiple projects.

Power Automate + Azure AKS

Power Automate · PowerApps · M365 · Azure AKS · Flask

Order management solution on Microsoft's low-code stack — **PowerApps** frontend, **Power Automate** flows, M365 integrations. Where custom logic was needed beyond the low-code platform's reach, a **Flask** microservice was deployed on **Azure AKS**.

Angular + Django Web Apps

Angular · TypeScript · Bootstrap · Django · DRF · Playwright

Several frontend deliveries on **Django** backends at Westcode — **Angular** component architecture, routing, reactive forms, API integration. Accompanied by **Playwright** end-to-end test suites in **TypeScript** across multiple projects.

EXPERIENCE

Westcode GmbH Full Stack Developer · Full-time · Dortmund	2023 – 2026
Adesso Insurance Solutions GmbH DevOps Engineer · Part-time · Dortmund	2022
IITS Consulting GmbH Full Stack Developer · Part-time · Dortmund	2021 – 2022

🔬 RESEARCHER

Goes deeper when standard tools fall short.

The B.Sc. thesis required a custom sampling algorithm for mobility prediction — no off-the-shelf model fit the problem. A client project demanded context-aware AI chat, which meant forking an embedding library and designing tag-based context routing from scratch. The interesting problems tend to be the ones where there is no package to install.

RESEARCH & DATA

pgvector	OpenAI embeddings	agno (custom fork)	
Celery chains	Pandas	NumPy	TensorFlow
scikit-learn	CUDA	OpenMP	MPI

PROJECT SHOWCASES

Human Mobility Prediction (B.Sc. Thesis)

Python · Pandas · Custom sampling algorithm

Prediction of movement patterns across multiple cities using a custom iterative sampling approach. Candidates are drawn from a pool, scored by similarity, and refined until optimal matches emerge. Extension paths for query users are then computed based on their matched candidates' known trajectories. TU Dortmund, supervised by Mart Hagedoorn M.Sc., 2025.

Marketplace Analytics Scraper

Python · Dashboards · Data pipelines

Production scraper with analytics dashboards and seller statistics, built for a paying customer in 2021. Automated data collection, processing, and visualisation for marketplace performance tracking.

Parallel Computing (Coursework)

C++ · CUDA · OpenMP · MPI

GPU reduction kernels (naive, sequential addressing, unrolled warp), **OpenMP** fork-join, **MPI** message passing. TU Dortmund coursework.

Competitive Programming

C++ · Python · Algorithms

Active **Codeforces** participant. Completed a Fachprojekt on competitive programming at TU Dortmund. Coursera ML specialisation covering **TensorFlow**, scikit-learn, and NumPy.

🛡️ DEFENDER

Thinks about what could go wrong.

Not a dedicated security engineer, but security is part of the development process. Production Django APIs are configured with OAuth2, JWT, and CORS/CSRF enforcement based on real-world requirements — not default settings. Built an SVG threat detection tool after encountering injection vectors that standard upload validation does not cover.

SECURITY & INFRASTRUCTURE

OAuth2	JWT	CORS/CSRF	Azure Entra ID
K8s RBAC	Datadog	Sentry	Burp Suite
Metasploit	ZeroTier	Kali Linux	

PROJECT SHOWCASES

SVG Threat Detector (Open Source PoC)

Python · XML/AST analysis · XSS detection

Detects script injection, **XSS payloads**, and malicious elements in SVG uploads. Parses the XML tree and performs AST-level analysis of embedded scripts, **onload handlers**, and href injection vectors. Motivated by the observation that most upload validators only check MIME type without inspecting the actual SVG content.

API & K8s Hardening

OAuth2 · JWT · CORS · CSRF · Azure Entra ID · Django Allauth · K8s RBAC

Production Django APIs configured with **JWT** token management, **OAuth2** flows, and correct **CORS/CSRF** enforcement — defaults are insufficient once cross-origin scenarios become non-trivial. **Azure Entra ID** SSO integrated via Django Allauth. Kubernetes clusters configured with **RBAC** policies and namespace isolation.

Monitoring & Infrs