Pavlo Fedyna

Senior Software Engineer

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Summary

Software engineer with 15+ years of experience building scalable, high-traffic services and data processing pipelines on AWS.

Currently focused on search systems, hybrid/semantic search, and LLM-powered conversational interfaces at one of Germany's largest retailers.

Core stack spans Java, Rust, Kotlin and Python on AWS, with a growing focus on Rust for performance-critical services.

Clean code and XP advocate with a user-centric mindset.

Experience

Senior Software Engineer at **Otto&Co**   *Oct 2021 - Present*

Architecting and developing the search platform for Germany's largest online retailer.

Built and maintained a hybrid search core service combining lexical and semantic search.

Rewrote the hybrid search core in Rust, significantly improving performance.

Migrated infrastructure from CloudFormation to Terraform and CI/CD from Jenkins to Github Actions.

Optimized AWS runtime costs.

Built and maintained data pipelines for stream processing of product data into the search index.

Own observability and resilience stack.

Developed an LLM-backed Query Intent service.

Developed agentic conversational search assistant (storefront AI chatbot)

Prototyped voice-to-voice conversational search.

Java · Kotlin · Rust · Python · Spring · Spring WebFlux · Helidon 4 · Solr · Kafka · Hazelcast · AWS · AWS CDK · Docker · Terraform · Github Actions · Jenkins · Packer · Grafana · Prometheus · Mimir · Langchain4j

Tech Lead at **Caregonexx**   *Oct 2020 - Sep 2021*

Led a team of 5 engineers, collaborating with the PO on quarterly OKRs.

Refined user and system requirements before feeding them into the development pipeline.

Designed and developed a SaaS solution for fleet and shipment management.

Built a tour cost and time optimization service.

Java · TypeScript · SQL · Spring · React · AWS · Docker · PostgreSQL

Senior Software Engineer at **Caregonexx**   *Aug 2020 - Oct 2020*

Implemented and maintained an internal customer-facing solution for fleet and shipment management.

Integrated GPS providers for real-time fleet tracking.

Introduced TDD, pair programming, and CI/CD practices to the team.

Java · TypeScript · SQL · Spring · React · AWS · Docker · PostgreSQL

Senior Software Engineer at Zalando Marketing Services   *Feb 2018 - Aug 2020*

Built the reporting solution for Zalando's ad management self-service platform.
Rewrote the reporting and analytics pipeline, migrating to cloud
and achieving significant reduction in daily operational costs (10x).
Implemented high-load data stream consumers powering the analytical processing pipeline.
Developed an analytics module for the marketplace platform.
Established 24/7 on-call support structure for the team.
Introduced TDD, pair programming, and CI/CD practices.
Enabled stakeholder access to data through self-service sharing solutions.

Python · Java · Scala · SQL · Spring · Spark · Airflow · Databricks · AWS · Docker · Kubernetes · PostgreSQL · GraphQL · React · Jenkins

Senior Software Engineer at EOS Technology Solutions   *Aug 2017 - Feb 2018*

Implemented and maintained a client-data management system.
Refactored and added test coverage to legacy parts of the system.
Optimized the ORM layer to improve user experience.
Introduced BDD and automated web testing.

Java · SQL · JavaScript · Spring · Hibernate · React · Selenium · Cucumber · Kafka · Jenkins

Lead Software Engineer at Smaato Inc.   *Mar 2017 - Aug 2017*

Led development of the B2B client portal, delivering the MVP on time
despite staffing constraints and high management pressure.
Led development of the ad delivery auction management system.
Built a plugin framework for the auction system, enabling sales engineers
to onboard advertisers without developer involvement.

Java · SQL · JavaScript · Python · React · Selenium · Docker · AWS · Jenkins

Software Engineer at Smaato Inc.   *Oct 2014 - Mar 2017*

Implemented and maintained a high-load, distributed ad delivery auction management system.
Refactored the auction handling algorithm, improving CPU performance by 20%
and reducing cluster size.
Migrated and rewrote several legacy applications and components.

Java · SQL · JavaScript · Spring · Hibernate · Docker · AWS · Jenkins · Packer · Kafka

Software Engineer at Edvantis Inc.   *Mar 2012 - Sep 2014*

Delivered a variety of projects for US and European customers.

Java · SQL · JavaScript · Spring · AWS

Junior Software Engineer at Lvivsoft Inc.   *Jul 2011 - Mar 2012*

Implemented and maintained a social media platform.
Deployed and tested application backend and frontend.

Java · SQL · JavaScript · Spring · Solr · AWS

Skills

Languages: Java, Kotlin, Python, Rust, TypeScript, JavaScript, SQL
Frameworks: Spring, Spring WebFlux, Helidon 4, React, GraphQL, Langchain4j

Infrastructure:	AWS, AWS CDK, Docker, Kubernetes, Terraform, Kafka, Hazelcast, Github Actions, Jenkins, Packer
Observability:	Grafana, Prometheus, Mimir
Data:	Solr, PostgreSQL, Spark, Airflow, Databricks

Education

B.S in Applied Linguistics *Aug 2006 - Aug 2010*
State University 'Lviv Polytechnics'

Interests

Rust on Embedded Systems — Exploring bare-metal programming and IoT applications with Rust's safety guarantees

Game Development — Building games as a creative outlet and to explore real-time systems architecture

Homelab Infrastructure — Running a self-hosted Proxmox cluster with Kubernetes for learning and experimentation

Work Preferences

Employment:	Full-time
Arrangements:	Hybrid, Remote (preferred)
Travel:	Open to limited travel as needed