

# Shakil Jansberg

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Munich, Germany

German Citizen | Available immediately | Willing to Relocate

**Profile:** Full Stack Developer | Java/Spring Boot & TypeScript/Angular | Expert in CI/CD, Test Engineering & System Resilience | DevSecOps & Cloud-Native Development

I am a developer with a focus on building **production-grade, containerized applications** using the **Angular + Spring Boot** stack. I specialize in "**Shift-Left Security**," ensuring that every line of code—from the UI component to the cloud infrastructure—is secure, scalable, and audit-ready by design. I don't just build features; I architect resilient systems that handle massive datasets and complex business logic without compromising performance.

## Enterprise Core Competencies:

- **Resilient Backend Development:** Specialist in **Spring Boot** microservices, implementing **distributed tracing (correlation IDs)** and **Resilience4j circuit breakers** to prevent cascading failures. I ensure data integrity through **idempotency keys**, strict **DTO validation**, and optimized **JPA batch operations** for high-volume transactions.
- **Scalable Frontend Architecture:** Expert in **Angular component design**, utilizing **OnPush change detection** and **RxJS state normalization** to maintain high performance in data-heavy SPAs. I prioritize **accessibility (a11y)** and implement advanced security like **CSP headers** and **silent JWT rotation** as standard practice.
- **Automated DevSecOps & Cloud:** I manage the full deployment lifecycle using **hardened Docker builds** (multi-stage, non-root users) and **Ansible** for infrastructure as code. I build **CI/CD pipelines** that automate security scanning (**AST, DAST, SCA**) and secret detection to catch vulnerabilities before they reach production.
- **Observability & Compliance:** Proactive in system health monitoring using the "**Three Pillars**"—**metrics, centralized logging, and distributed tracing**. Experienced in handling **GDPR/PII compliance** through automated log redaction and column-level database encryption

## PROFESSIONAL EXPERIENCE

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**Independent Software Engineer — Structured Full-Stack & QA Engineering Upskilling | Sep 2025 – Dec 2025**  
<https://www.pdfchatten.com/> | Vercel: <https://chatpdf-shaki.vercel.app/>

- Undertook a structured, hands-on upskilling phase to strengthen modern full-stack development and quality engineering skills.
- Completed end-to-end development and deployment of a full-stack, AI-powered Software-as-a-Service (SaaS) application. The platform enables users to interact conversationally with their PDF documents, leveraging advanced **Retrieval-Augmented Generation (RAG)** to provide accurate, context-aware answers sourced directly from the user-uploaded documents, eliminating AI hallucinations.

### Technical Implementation & Key Responsibilities

- **Full-Stack System Architecture**
  - Architected a scalable, full-stack system using a modern tech stack including **Next.js 13+ (App Router)** with **TypeScript** for the frontend and API layer, **Tailwind CSS** and **shadcn/ui** for the responsive UI, and **Clerk** for secure authentication.
- **Data & AI Pipeline Engineering**
  - Engineered a robust data and AI pipeline by integrating **Neon (Serverless PostgreSQL)** with **Drizzle ORM** for type-safe database operations and **AWS S3** for secure, scalable file storage.
  - Designed and implemented the core AI functionality using the **OpenAI API** and **LangChain** framework. Developed a custom RAG system where PDFs are processed, chunked, and their embeddings stored in **Pinecone** (vector database), enabling the AI to retrieve relevant document context for each user query.
- **Real-Time User Experience**
  - Integrated real-time, streaming chat interfaces using the **Vercel AI SDK**, delivering a seamless, ChatGPT-like user experience where AI responses are streamed directly to the client.
- **Monetization & Business Logic**
  - Implemented monetization and subscription management by integrating the **Stripe API**, including checkout flows, webhooks for payment event handling, and a customer portal, enabling recurring revenue.
- **Deployment & DevOps**
  - Established a full CI/CD pipeline by connecting the GitHub repository to **Vercel**, enabling automatic builds and deployments on every push to the main branch, ensuring rapid and reliable iteration.

### Key Technologies

- **Next.js:** Served as the full-stack React framework for server-rendered frontend and API routes, chosen for performance and seamless Vercel integration.
- **TypeScript:** Ensured type safety and improved maintainability throughout the complex codebase.
- **OpenAI API:** Powered core AI functionality for generating chat responses and creating text embeddings.
- **LangChain:** Orchestrated the document processing pipeline to load and split PDFs into chunks.
- **Pinecone:** Acted as the vector database for high-speed similarity search on document embeddings.
- **Stripe:** Handled all subscription billing and payment processing for the "Pro" tier.
- **AWS S3:** Utilized for secure and scalable cloud storage of user-uploaded PDF files.

- **Neon (PostgreSQL):** Provided the serverless, scalable relational database for application data.
  - **Drizzle ORM:** Used as a TypeScript-first ORM for type-safe and efficient database interactions.
  - **Tailwind CSS:** Enabled rapid development of a custom, responsive UI with a utility-first approach.
  - **Clerk:** Implemented for secure and streamlined user authentication and session management.
  - **Vercel AI SDK:** Simplified the implementation of the real-time, streaming chat interface.
  - **Vercel:** Chosen as the deployment platform for its global edge network and native CI/CD.
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## **Software Developer / Systems Engineer | ATOSS CSD Software GmbH | Feb 2025 – Sept 2025**

Ensured the stability and modernization of a mission-critical workforce management platform, working across backend systems, integrations, and DevOps pipelines.

**Core Technologies:** Java 8/11, Spring Boot, Eclipse RCP, SOAP/REST APIs, PostgreSQL, GitLab CI/CD, Docker, JUnit, SonarQube

### **Key Contributions:**

- **Systems Stability:** Maintained and improved a large-scale Java application in production, resolving incidents and implementing durable fixes.
  - **Critical Integrations:** Built and operated Java integrations with ATOSS Time Control, ensuring reliable data flow via SOAP web services.
  - **CI/CD & Automation:** Designed GitLab CI/CD pipelines, introduced Docker-based builds, and integrated automated testing and SonarQube quality gates.
  - **Modernization:** Supported the transition from monolith to services, prototyping Spring Boot REST APIs for improved scalability.
  - **Developer Efficiency:** Created internal Eclipse plugins to automate workflows and enforce standards.
  - **Impact:** Strengthened production reliability, deployment safety, and operational foundations in a strict enterprise environment.
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## **Software Developer & Support Engineer | Martin Care GmbH | March 2023 – January 2025**

Drove full-stack development and system optimization for healthcare software solutions, bridging backend APIs, web/mobile applications, and DevOps. Translated deep technical insights from support into robust engineering improvements, enhancing performance, scalability, and deployment reliability.

### **Key Contributions & Impact:**

- **Engineered Scalable Backend Systems:** Developed and optimized secure **RESTful APIs** using **Java/Spring Boot**, integrating **Hibernate** and **Ehcache** to enhance performance and reduce database load. Designed efficient **PostgreSQL** schemas to support complex data workflows.
- **Delivered Integrated Full-Stack Features:** Built responsive web interfaces with **Angular** and **Angular Material** for internal tools. Extended platform functionality by developing companion mobile applications with **Flutter**, implementing **BLE communication** and local data persistence.

- **Architected & Modernized Deployment Pipelines:** Improved system resilience and deployment speed by designing and implementing a **microservices architecture**. Automated build, test, and deployment processes using **Docker**, **Jenkins**, and **Ansible**, establishing a reliable CI/CD foundation.
  - **Solved Critical Integration & Support Challenges:** Integrated real-time **RFID/BLE asset tracking** via custom APIs, enabling seamless data flow between legacy and modern systems. Leveraged support insights to proactively improve data synchronization, reduce latency, and optimize system-wide performance.
  - **Championed Quality & Collaboration:** Elevated code quality through rigorous peer reviews and the development of comprehensive test cases. Actively contributed to Agile workflows, ensuring consistent delivery of stable software across multiple product versions.
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### **Software Developer & Support Engineer | dotSource GmbH | April 2021 – February 2023**

Developed and maintained high-performance, full-stack features for Fujifilm's eCommerce platform using Java, Spring Boot, and Angular. Ensured system reliability and rapid delivery by implementing robust CI/CD pipelines and providing expert-level technical support.

#### **Key Contributions & Impact:**

- **Engineered Scalable Backend Services:** Designed and developed high-performance **RESTful APIs** with **Java 11/17** and **Spring Boot**, secured with **JWT-based Spring Security**.
  - Enhanced functionality and reduced latency by integrating **Hibernate**, **Ehcache**, and optimizing communication with **PostgreSQL** and **MySQL** databases.
  - **Delivered Modern Frontend User Experiences:** Built responsive and dynamic user interfaces for the Fujifilm platform using **Angular 13+**, **Angular Material**, and **RxJS**. Ensured seamless navigation and efficient data flow with **Angular Router** and **HttpClient**.
  - **Modernized DevOps and Deployment Pipelines:** Automated the software delivery lifecycle by **containerizing applications** with **Docker** and orchestrating end-to-end **CI/CD pipelines** using **Jenkins** and **Ansible**, significantly reducing manual effort and accelerating release cycles.
  - **Championed System Reliability and Code Quality:** Ensured robustness through comprehensive testing strategies using **JUnit**, **Mockito**, and **Postman**.
  - Provided **Level 2/3 support** by diagnosing production issues, implementing hotfixes, and performing root-cause analysis to minimize downtime and improve client trust.
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### **Full Stack Software and Web Developer | EQS Group AG | June 2017 – April 2021**

Engineered and evolved full-stack web applications from a Perl foundation to modern Java/Spring Boot and Angular systems. Drove platform modernization by establishing automated CI/CD pipelines and championing quality-first development practices.

#### **Key Contributions & Impact:**

- **Built & Modernized Scalable Applications:** Spearheaded development using **Perl (Mojolicious)** and later **Java 11/17, Spring Boot, and Angular 13+**, optimizing **MySQL/PostgreSQL** databases for performance and reliability.

- **Engineered Secure & High-Performance APIs:** Developed RESTful APIs with **Spring Boot (JWT Security)** and **Perl**, integrating third-party services. Enhanced backend efficiency using **Hibernate ORM** and **Ehcache** caching.
  - **Developed Engaging User Interfaces:** Created responsive, dynamic frontends with **Angular (Material, RxJS)** and core **JavaScript/jQuery/CSS** for seamless cross-platform user experiences.
  - **Automated DevOps & Deployment:** Accelerated release cycles by **containerizing apps with Docker** and implementing **CI/CD pipelines with Jenkins/Ansible** for automated testing and deployment.
  - **Championed Code Quality & Reliability:** Established **TDD** practices, rigorous testing with **JUnit/Mockito/Postman**, and **Git-based** collaboration to ensure system resilience and operational excellence.
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## CAREER PROGRESSION (PRE-2017)

### Senior Software Support Engineer | Xchanging Solutions, Singapore | 2011 – 2016

- Spearheaded full-stack development and DevOps for client solutions in the financial and public sectors.
- Architected and developed enterprise applications using **Java, Spring Framework, and Hibernate**, with **Oracle/MySQL** databases and RESTful APIs.
- Established early **CI/CD pipelines** using **Jenkins, Ansible, and Maven** to automate build, test, and deployment processes.
- Enhanced system security and reliability through **SAST/DAST testing (HP Fortify)** and rigorous **Agile/Scrum** project management.

### Earlier Roles in Software Development | 2008 – 2011

- Built a foundation in full-stack development and client-focused support with technologies including **Java, Java Servlets (JSP), Spring MVC, and Hibernate**, alongside **Oracle/MySQL** databases.
  - Developed desktop and web applications for print management, usability testing, and parental control software, integrating **SOAP-based web services** and **JasperReports** for reporting.
  - Gained early experience in **multi-tier application architecture, database design, and end-user training and support** in business and consumer software environments.
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## EDUCATION

### Master of Science in Computer Science (MSCS)

University of the Punjab (PUCIT), Lahore

*Relevant Coursework:* Software Engineering, Database Systems, Artificial Intelligence, Object-Oriented Programming, Project Management, Data Communication & Networks, OO Analysis & Design

### Bachelor of Science in Computer Science (BSCS)

University of the Punjab (PUCIT), Lahore

*Relevant Coursework:* Software Analysis & Design, Operating Systems, Data Structures & Algorithms, Database Management Systems, Computer Architecture, Theory of Automata

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## CERTIFICATIONS

### Professional Certifications

- Oracle Certified Professional: Java SE 17 Developer
- AWS Certified Solutions Architect – Associate
- AWS Certified Cloud Practitioner
- Salesforce Certified Developer I & II

### Linux Foundation – Technical Training Portfolio

- Programming & Development: Node.js, Linux Kernel Dev, OpenAPI
- Cloud & Infrastructure: Cloud Infrastructure, GitOps, Kubernetes, Serverless
- DevOps & CI/CD: Jenkins, DevOps & SRE, DevSecOps
- Cybersecurity: OWASP Top 10, XSS, Cybersecurity Essentials, Zero Trust
- Foundational Systems: Linux, Common Domain Model (CDM)